

SENATE JOURNAL

Thirty-sixth Legislature—Third Called Session.

FIRST DAY.

Senate Chamber,
Austin, Texas,
Thursday, May 20, 1920.

In obedience to the call of His Excellency, Hon. W. P. Hobby, Governor of the State of Texas, convening the Thirty-sixth Legislature in Third Special Session this, the 20th day of May, 1920, the Senate met in the Senate Chamber of the Capitol in the City of Austin at 10 o'clock, a. m., and was called to order by Lieutenant Governor W. A. Johnson.

Temporary Officers.

The Chair announced the appointment of the following temporary officers:

Secretary, W. V. Howerton.
Sergeant-at-Arms, J. A. Kenny.
Doorkeeper, W. H. Brummett.
Journal Clerk, John D. Cofer.
Chaplain, Rev. S. H. Morgan.

Roll Call.

The following Senators answered to their names:

Alderdice.	Hopkins.
Buchanan of Bell.	McNealus.
Caldwell.	Page.
Clark.	Rector.
Cousins.	Smith.
Dayton.	Suiter.
Dean.	Westbrook.
Dudley.	Williford.
Faust.	Witt.
Hall.	Woods.
Hertzberg.	

Absent—Excused.

Bailey.	Floyd.
Bledsoe.	Gibson.
Buchanan of Scurry.	Parr.
Carlock.	Strickland.
Dorough.	

Prayer by Rev. S. H. Morgan of Bastrop.

Proclamation by the Governor of the State of Texas.

By virtue of the authority vested in me by the Constitution of this State, I, W. P. Hobby, Governor of Texas, do hereby call a special session of the Thirty-sixth Legislature to convene in the City of Austin, Texas, at ten o'clock, a. m., Thursday, May the Twentieth, 1920, for the following purposes, to-wit:

1. To enact legislation which will make it possible to establish zones in which the growing of cotton may be effectively prohibited or regulated in areas infested with what is known as the pink boll worm to the end of stamping out such infestation as a menace to the cotton industry of Texas, and to the end of preventing a quarantine against the interstate shipment of Texas cotton and cotton products by the Horticultural Board of the United States Government.

2. To make provisions for maintaining the public schools and the educational institutions of Texas during the next scholastic term.

3. To make appropriations necessary to supply deficiencies and for the support of the State Government.

4. To consider and act upon such other matters as may hereafter be presented pursuant to Section Ten, Article Three, of the Constitution of the State of Texas.

IN TESTIMONY WHEREOF, I have hereunto set my hand and caused the Seal of the State of Texas to be affixed at Austin, this the eighth day of May, A. D. 1920.

(Signed) W. P. HOBBY,
(Seal) Governor of Texas.

BY THE GOVERNOR:

(Signed) C. D. MIMS,
Secretary of State.

THE STATE OF TEXAS:
DEPARTMENT OF STATE.

I, C. D. Mims, Secretary of State of the State of Texas, do hereby certify that the attached and foregoing is a true and correct copy of the Proclamation issued by W. P.

Hobby, Governor of Texas, calling a Special Session of the Thirty-sixth Legislature to convene in the City of Austin, Texas, at ten o'clock a. m., Thursday, May the twentieth, 1920, as said Proclamation now appears of record in this Department.

IN TESTIMONY WHEREOF, I have hereunto signed my name officially, and caused the seal of State to be hereon impressed, at the City of Austin, Texas, this the 20th day of May, A. D. 1920.

C. D. MIMS,
Secretary of State.

Oath Administered to Senator Davidson.

Lieutenant Governor Johnson administered the oath of office to Senator Lynch Davidson of Harris County.

Report of Caucus Committee.

Senate Chamber.
Austin, Texas, May 20, 1920.

To the President of the Senate:

Sir: Upon the call of Senator McNealus, chairman of the last caucus by the Texas Senate, a caucus was held on May 20, 1920, at which a majority of Senators were present. The purpose of the caucus was to determine the number and personnel of the Senate employes and officers for the ensuing called session. Senator McNealus was elected chairman and Senator Caldwell secretary of the caucus.

The following were recommended as the officers and employes of the Senate for the ensuing called session of the Thirty-sixth Legislature.

Secretary: W. V. Howerton.

Assistant Secretary: Jno. Cofer.

Assistant Journal Clerk: Mrs. Josephine Collins.

Sergeant-at-Arms: M. F. Hornbuckle.

First Assistant Sergeant-at-Arms: J. A. Kenny.

Second Assistant Sergeant-at-Arms: Capt. G. T. Walker.

Sergeant-at-Arms in the Gallery: Morris Midkiff.

Doorkeeper: W. H. Brummett.

Assistant Doorkeeper: P. A. Hicks.

Calendar Clerk: Miss Gardner.

Assistant Calendar Clerk: Harris Bell.

Enrolling Clerk: Miss Edith Saunders.

Assistant Enrolling Clerk: Miss Ruth Nichols.

Engrossing Clerk: Mrs. Dorman.

Assistant Engrossing Clerk: Miss Annie Parks.

Telephone Operator: Miss Jacobs.

Mailing Clerk: Mrs. W. S. Banks.

Assistant Mailing Clerk: Mrs. Sturdevant.

Newspaper Messenger: Jno. E. Cosgrove.

Postmaster: Mrs. Clyde Smith.

Chaplain: Rev. S. H. Morgan.

It was further recommended that each Senator be permitted to name one stenographer typist as his secretary and that such secretary act as clerk to each committee of which such Senator may be chairman.

It was further recommended that the Lieutenant Governor have the exclusive appointment of such number of pages and porters as may be necessary for the dispatch of the Senate's business.

It was further recommended that the Lieutenant Governor be permitted to select a secretary, a stenographer and a personal messenger.

It was further recommended that the chairman of the Finance Committee be authorized to appoint a clerk to the Finance Committee and a stenographer to the Finance Committee if in his judgment the stenographer be necessary.

It was further recommended that the employes of the Senate shall be paid a compensation of five dollars per day, except the Secretary and the Journal Clerk and the Clerk of the Finance Committee shall each be paid seven dollars per day, and except further that the pages and the porters shall be paid two dollars per day.

It was further recommended that each Senator have such time as he may desire to make his personal appointment and that such appointment be made by handing the name of such appointment to the Secretary of the Senate.

It was further recommended that 1200 copies of the daily Journal be printed and that the same be pro rated among the Senators and the Lieutenant Governor.

It was further recommended that the Sergeant-at-Arms rent such typewriters as may be necessary for the use of the employes of the Senate, such rental not to exceed four dollars per month.

It was further recommended that the Lieutenant Governor and each Senator in addition to the stationery and postage furnished him be allowed expenses incurred in transmitting and receiving telephone and telegraph messages as may be actually necessary in the discharge of his official duties, not to exceed during the session the aggregate sum of twenty-five dollars, all bills for such telegrams and telephone messages to be paid out of the contingent fund of the Senate when approved by the Senator incurring the same.

It was further recommended that each Senator be permitted to subscribe to five daily papers to be paid for out of the contingent fund.

McNEALUS, Chairman.
CALDWELL, Secretary.

Officers Elected.

The caucus report was laid before the Senate and on the motion of Senator McNealus, the Secretary was directed to cast the vote of the entire Senate for those named in said caucus report to be the elective officers of the Senate. The same was done and the officers were declared elected.

Senators Excused.

By unanimous consent, the following Senators were excused for absences: Senators, Parr, Woods, Dorrough, Bailey, Bledsoe, Buchanan, of Scurry, Floyd, Gibson, and Strickland.

Senator Carlock was excused indefinitely.

Oaths of Office Administered to Officers.

The following officers appeared before the bar of the Senate and were administered the oath of office by Lieutenant Governor Johnson.

Secretary, W. V. Howerton; assistant secretary, John D. Cofer; assistant Journal clerk, Mrs. Josephine Collins; calendar clerk, Miss Lula Gardner; assistant calendar clerk, Harris Bell; enrolling clerk, Miss Edith Saunders; assistant enrolling clerk, Miss Ruth Nichols; engrossing clerk, Mrs. Dorman; telephone oper-

ator, Miss Jacobs; mailing clerk, Mrs. W. S. Banks; assistant mailing clerk, Mrs. Sturdevant; newspaper carrier, Jno. E. Cosgrove; postmaster, Mrs. Clyde Smith; chaplain, Rev. S. H. Morgan.

Authority Given Lieutenant Governor.

A motion made by Senator Caldwell was carried authorizing the Lieutenant Governor to move employes and officers from one department to the other as needed.

Committee Appointed to Notify Governor and the House.

Upon the motion of Senator McNealus, the following committees were appointed to notify the Governor and the House that the Senate was organized and ready for work.

To notify the House: McNealus, Faust, Westbrook; to notify the Governor: Suiter, Hertzberg and Dean.

Simple Resolution No. 1.

Resolved, That the Comptroller be directed and authorized, and he is hereby directed and authorized to pay out of the contingent expense funds of either the First or Second Called Session of the Thirty-sixth Legislature for the printing of the permanent Journals of the First and Second Called Sessions of the Thirty-sixth Legislature.

CALDWELL.

The resolution was read and adopted.

Addition to Agricultural Committee.

On the motion of Senator Suiter, the whole membership of the Senate was added to the Committee on Agriculture to hear the consideration of the pink boll weevil question.

Message from the Governor.

Here a messenger from the Governor appeared at the bar of the Senate with the following executive message:

Governor's Office.

Austin, Texas, May 20, 1920.

To the Thirty-sixth Legislature in
Third Called Session Assembled.

I have convened the Thirty-sixth Legislature in special session to take action with respect to the pink boll worm situation:

First. Because the Federal Horticultural board of the United States Department of Agriculture gave notice to me of an intended quarantine of the interstate movement from Texas of cotton lint, cotton seed, seed cotton, cotton seed cake, meal and all other cotton seed products except oil, unless provision is made by the State of Texas to aid in effectively exterminating the pink boll worm where the infestation has been found, and the Legislature alone has authority to make such provision.

Second. Because, as a menace to the cotton industry of Texas, constituting the source of livelihood of a vast portion of the citizenship of this State, constituting the leading industry of the State and the foundation upon which the business of our general citizenship mainly rests, the duty devolves upon the representatives of all the people to take steps to protect it from even the possibility of disaster, and give heed to the warning of those who have pointed out a danger, while that danger is yet apparently in its incipency.

In supplemental form I shall communicate to you all of the facts and information in my possession, to be printed in your journals for the benefit of each member, and to guide him in reaching a conclusion.

The pink boll worm situation first called for legislation at the third called session of the Thirty-fifth Legislature (Chapter 11, Approved October 3, 1917), creating a zone along the boundary between the State of Texas and the Republic of Mexico and defining limits of same for the purpose of aiding in the prevention of introduction into Texas of the Pink Boll Worm; providing also for quarantine of territory in Texas in which said pink boll worm may be found; and later, by the regular session of the Thirty-sixth Legislature (Chapter 41, approved March 10, 1919) amending and supplementing the act of 1917.

The Federal Horticultural board was under the impression the latter part of the year 1919 that the pink boll worm infestation had been eradicated

from Texas, and it was thought then that no further steps would be necessary, except regulation and close observation of growing cotton in areas heretofore infested. Under date of February 7, 1920, in a letter received by me a week later, the Federal Horticultural board advised me that the recommendations of the pink boll worm commission, appointed under the pink boll worm act of March 10, 1919, amounted to an abandonment of declaring non-cotton zones to cover infested districts, and entered a very vigorous protest against this action. The board urged that the pink boll worm commission be instructed by me to reconsider recommendation. Of course I had no authority to enforce such instructions, but I brought the matter to the attention of the Commissioner of Agriculture, and I summoned members of the commission, and urged the establishment of non-cotton zones to such extent as the commission may deem necessary to eradicate the pest, and with a view to avoiding a quarantine against the interstate movement of cotton from Texas. It would seem, therefore, that the pest assumed more aggravated form according to the information of the Federal Horticultural board between the latter part of 1919 and the latter part of February, 1920, and since then the demand for action on the part of the State by the board has been more persistent.

The pink boll worm commission advised me of the futility in their judgment of the establishment of non-cotton zones except upon making provision to reimburse cotton growers in the prohibited area for losses sustained. Nevertheless, out of respect to my request, the pink boll worm commission assembled and gave consideration to the protest of the Federal Horticultural board. On April 1, 1920, the commission recommended the establishment of non-cotton zones, under the condition that provision for compensation is made.

On March 18, 1920, the following official notice was issued by the Federal Horticultural board of the United States Department of Agriculture:

"The Secretary of Agriculture has information that the pink bollworm (*Pectinophora gossypiella*), a dangerous insect new to and not heretofore widely prevalent within and throughout the United States, occurs at various points in Texas and Louisiana.

"It appears necessary, therefore, to consider the advisability of quarantining

ing the States of Texas and Louisiana in accordance with the Plant Quarantine Act of August 20, 1912 (37 Stat. 315), as amended by Act of Congress Approved March 4, 1917 (39 Stat., 1134, 1165), and of placing such restrictions and prohibitions on the movement from these States of cotton lint, cotton seed, seed cotton, cotton seed cake, meal and all other cotton seed products except oil, and providing for such inspection, cleaning and disinfection of railway cars and other vehicles and freight, express, baggage or other materials as a condition of interstate movement as shall be deemed necessary to prevent the spread by such means and agencies of the pink bollworm in other States.

"Notice is therefore hereby given that a public hearing will be held at the Department of Agriculture, Washington, D. C., Room 11, Federal Horticultural Board, at 10 o'clock a. m., April 6, 1920, in order that any person interested in the proposed quarantine may appear and be heard either in person or by attorney."

I appeared at the hearing and for the State of Texas protested against the establishment of a quarantine under any conditions against the interstate movement of cotton or cotton products from Texas. I pledged the cooperation of the State of Texas, so far as the powers of my office would permit, to work out such a plan as the United States Department of Agriculture, acting through the Federal Horticultural board, might evolve, to the end of stamping out this infestation; provided the Federal Horticultural board declined to establish a quarantine against the interstate movement of cotton from Texas.

As a result of the hearing, the Federal Horticultural board set forth the following quarantine and restrictive action as necessary on the part of Texas, to stamp out the infestation and to prevent Federal quarantine:

"1. The State of Texas will establish and enforce a noncotton area covering the regulated zone now in effect in southeastern Texas with certain additions to include new points of infestation which have been determined outside the old quarantine line. This zone involves all or portions of the counties of Jefferson, Chambers, Galveston, Brazoria, Harris, Liberty, Fort Bend, Jasper and Newton.

"2. In addition to and surrounding this noncotton area, as a further factor of safety, the State of Texas will

establish and enforce a regulated zone of 25 miles in width. The growth of cotton in such regulated zone will be permitted under the restriction that the crop shall be under the full control of the State authorities in cooperation with the United States Department of Agriculture for the purpose of enforcing any safeguards that shall be determined to be necessary.

"3. The State of Texas will establish similar regulated zones of a ten-mile radius surrounding all oil mills in Texas which are known to have received seed during the last three years from the parishes in southwestern Louisiana now known to be invaded by this pest. Such points in Texas are now known to include Houston, San Antonio, San Marcos and Snyder.

"4. In addition it is understood and agreed that the State of Texas will maintain and continue the noncotton zone established for 1918, including the counties of Presidio and Brewster, in the Great Bend of the Rio Grande; and will continue the quarantine with respect to Val Verde, Kinney and Maverick counties on the basis of a noncotton zone, extending inward five miles from the Mexican border of these counties and the inclusion of a regulated zone of the portions of these counties outside of such border zone in which all cotton produced will be under the control of the State authorities in cooperation with the United States Department of Agriculture as in the case of other regulated zones."

With reference to these requirements, I respectfully report:

1. In view of the fact that the recommendation under date of April 1, 1920, of the pink boll worm commission established under the act of March, 1919, and the certification thereof by the Commissioner of Agriculture to me, is based upon the making of provision for compensation of those who sustain losses, I have not issued a proclamation establishing prohibited zones in portions of the counties of Jefferson, Chambers, Galveston, Brazoria, Harris, Liberty, Fort Bend, Jasper and Newton, as deemed necessary by the Federal Horticultural board, because in my judgment the act of March, 1919, does not authorize the Governor to issue a conditional proclamation, and same therefore would be null and void. The pink boll worm commission declined to recommend a noncotton zone until provision is made for compensation.

2. Since the establishment of a regulated zone of 25-miles in width is based upon the establishment of a noncotton area, set forth in the first requirement, this regulated zone can only be established when provision is made by the Legislature for the effective establishment of noncotton zones. It should be mentioned, too, that a zone of 25 miles area cannot be established under authority of the present law.

3. As a substitute for the third requirement the Federal Horticultural board has agreed that special observation zones without other restrictions will serve the purpose.

4. The fourth requirement has been substantially complied with.

The subject is therefore submitted for such legislation as may be necessary to enable the State of Texas to comply with the requirements of the Federal Horticultural board, or in the absence of such legislation to adopt a substitute which you in your wisdom may deem best to meet the situation and protect and foster the cotton industry of the State.

Quarantines against the shipment of cotton products from Texas, on account of the pink boll worm infestation, have been established as follows:

Arizona, November 16, 1917.

Arkansas, March 9, 1920.

Louisiana, March 10, 1920.

Mississippi, March 17, 1920.

Oklahoma, March 27, 1920.

South Carolina, April 1, 1920.

Announcement has been made that the States of Georgia, North Carolina and Alabama will quarantine unless the quarantine and restrictive measures proposed by the Federal Horticultural board are made effective. It is announced, too, that if these measures are put into effect the States which have imposed quarantine restrictions against the State of Texas will remove them.

Compensation to the owner for any field of cotton destroyed to accomplish the purposes of the pink boll-worm act of March 10, 1919, was authorized by the Legislature but no appropriation has yet been made to pay the losses incurred. Claims aggregating \$32,755.46 for cotton destroyed and \$2,199.00 for the expense of appraising same have been filed with the Commissioner of Agriculture of Texas and I recommend that your body make appropriation

to pay these claims when proved and certified according to law.

I recommend, too, that provision be made to compensate those who in the future may sustain losses for cotton destroyed under the direction of the State and that a fair and just method of compensation for losses actually sustained by those who are prohibited by the State from planting cotton be provided with safeguards that will save the State from imposition.

The Federal Horticultural board is composed of men eminent in the science of entomology actuated solely by the purpose of saving the crops of Texas and other States from destruction. The plan offered is for eradicating an infestation which, in the judgment of the board, threatens the cotton industry of Texas and of the country.

I consider, however, it is for you to determine whether this plan is the best or, after thorough consideration and a full and complete hearing of all who are interested and after counsel with those who speak for the Department of Agriculture of the United States, a different plan or a change in the one here presented is preferable. Recommendations emanating from a source so high deserve the utmost consideration at your hands. They become more important, too, since it has been proposed to place restrictions on the movement of cotton and cotton products from all of Texas and seriously impair the value of our greatest crop, and injure the general business of the State unless measures to eradicate the pest are made effective.

While it presents problems that are difficult and the conflicting view points are calculated to arouse feeling, I trust the subject will be approached by all concerned in the spirit of "let us reason together" and that a method will result which is fair and just and capable of successful operation.

Appearing before the Federal Horticultural board at the hearing in Washington on April 6, with the aid of members of the Texas delegation in Congress and the representatives of commercial and agricultural interests of Texas and citizens of Texas who attended the hearing, I was successful in preventing the establish-

ment of a quarantine against the interstate movement of cotton and cotton products from Texas. I pledged the cooperation of Texas to the end of meeting the demands of the situation, and in keeping with that pledge I herewith submit the subject for such action as you may see fit to take, confident that in the combined wisdom of the membership of your body, the best interests of Texas will be served.

Respectfully submitted,
W. P. HOBBY,
Governor.

Committee Appointment.

The Lieutenant Governor announced the following committee appointments:

Senator Bledsoe to the Committee on Agricultural Affairs, Chairman; Committee on Counties and County Boundaries, Constitutional Amendments, and Stock and Stock Raising.

Senator Davidson to the Committee on Town and City Corporations, Chairman.

Message from the Governor.

Here a messenger from the Governor appeared at the bar of the Senate with the following executive message:

Governor's Office,
Austin, Texas, May 20, 1920.

To the Texas State Senate:

Gentlemen: I ask the advice, consent and confirmation of the Senate to the following recess appointments:

Secretary of State, C. D. Mims, of Tyler, appointed April 1st, 1920, vice George F. Howard, resigned.

Commissioner of Insurance and Banking, J. C. Chidsey of Houston, appointed April 1st, 1920, vice George Waverly Briggs, resigned.

Game, Fish and Oyster Commissioner, J. R. Jefferson of Beaumont, vice W. G. Sterett, resigned.

Assistant Attorney General Court of Criminal Appeals, Alvin M. Owsley of Denton, appointed October 30th, 1919, vice E. A. Berry, resigned.

State Board of Control, S. B. Cowell, Grayson County; L. W. Tittle of Travis County, and A. R. Johnson, Jr., of Burnet County, appointed December 31st, 1919.

Members of the Board of Examiners of Land Surveyors, Charles Archer of Dallas and Mark E. Ragsdale of Brownwood, appointed October 17th, 1919.

Members of the State Fire Insurance Commission, T. M. Scott, vice S. W. English, resigned, appointed May 1st, 1920; A. P. Wooldridge of Austin, appointed May 1st, 1920, vice T. M. Scott.

Associate Justice of the Court of Civil Appeals for the Fifth Supreme Judicial District, Dexter Hamilton of Corsicana, appointed May 10th, 1920, vice Chas. A. Rasbury, resigned.

State Comptroller, M. L. Wiginton of Hillsboro, appointed December 31, 1919, vice L. W. Tittle, resigned.

Member of the Board of Regents of the State University, H. A. Wroe of Austin, appointed January 14th, 1920, vice Geo. W. Littlefield, resigned.

Member of the Board of Regents of Normal Schools, John Marshall of Sherman, appointed March 27th, 1920, vice J. A. Elkins, resigned.

Chairman of the Board of Prison Commissioners, R. M. Johnston of Houston, appointed January 12th, 1920, vice R. L. Winfrey, resigned.

Industrial Accident Board, J. H. Fowler of San Antonio, appointed March 1st, 1920, vice E. A. Berry, resigned; and Edwin R. York of Gatesville, appointed March 1st, 1920, vice J. H. Fowler.

Library and Historical Commission, Miss Kate Hunter of Palestine, appointed October 16th, 1920, vice Mrs. G. R. Scott, resigned; Mrs. E. L. Perry of Freeport, appointed March 16th, 1920, vice Mrs. J. B. Dibrell, deceased; Richard F. Burgess of El Paso, appointed November 16th, 1919; and Wm. M. Anderson, Jr., of Dallas, appointed March 16th, 1920.

Commissioner of Appeals, Section A, R. F. Spencer of San Antonio, appointed December 31st, 1919, vice Beeman Strong, resigned.

Commission of Appeals, Section B, Norman G. Kittrell of Houston, appointed November 22nd, 1919, vice J. T. Montgomery, resigned.

Member of the State Text Book Commission, Miss Rachel I. Watson of Denison, appointed January 10th, 1920, vice Mrs. Ella F. Little, resigned.

Member of the Board of Confederate Home, W. H. Gaston of Dallas.

appointed September 25th, 1919, vice W. R. Davis, resigned.

District Judge 1st Judicial District, J. T. Adams of Orange, appointed October 25th, 1919, vice W. T. Davis, resigned.

District Judge 12th Judicial District, J. A. Platt of Groveton, appointed November 16th, 1919, vice Ben H. Powell, resigned.

District Judge 23rd Judicial District, M. S. Munson of Angleton, appointed August 22nd, 1919, vice Samuel J. Stiles, resigned.

District Judge 30th Judicial District, H. F. Weldon of Wichita Falls, appointed February 1st, 1920, vice W. N. Bonner, resigned.

District Judge 32nd Judicial District, W. P. Leslie of Colorado, appointed March 30th, 1920, vice W. W. Beall, resigned.

District Judge 42nd Judicial District, W. R. Ely of Baird, appointed November 8th, 1919, vice Harry Tom King, resigned.

District Judge 61st Judicial District, Walter E. Monteith of Houston, appointed November 1st, 1919, vice Henry J. Dannenbaum, resigned.

District Judge 88th Judicial District, E. A. Hill of Eastland, appointed September 3rd, 1919, vice Joe Burkett, resigned.

District Attorney 4th Judicial District, J. P. Anderson of Center, appointed February 7th, 1920, vice J. H. McHaney, resigned.

District Attorney 24th Judicial District, Wayne Davis of Goliad, appointed September 8th, 1919, vice A. G. Hartman, resigned.

District Attorney 27th Judicial District, Lewis H. Jones of Belton, appointed October 8th, 1919, vice M. M. White, resigned.

District Attorney 29th Judicial District, M. L. Arrington of Granbury, appointed April 16th, 1920, vice Frank S. Morris, resigned.

District Attorney 32nd Judicial District, E. I. Hill of Sweetwater, appointed April 1st, 1920, vice W. P. Leslie, resigned.

District Attorney 33rd Judicial District, Geo. E. Christian of Burnet, appointed October 10th, 1919, vice T. E. Hammond, resigned.

District Attorney 46th Judicial District, J. V. Leak of Memphis, appointed September 5th, 1919, vice O. T. Warlick, resigned.

District Attorney 76th Judicial

District, J. H. French, Jr., of Dain-gerfield, appointed April 16th, 1920, vice Butler Ralston, deceased.

District Attorney 77th Judicial District, O. M. Wroe of Groesbeck, appointed February 18th, 1920, vice Lewis M. Sealy, resigned.

Respectfully submitted,

W. P. HOBBY,
Governor.

The message was laid before the Senate and referred to the Committee on Governor's Nominations.

House Notifies Senate.

Here a committee of three members of the House appeared at the bar of the Senate and notified the Senate that the House was organized and ready for business.

The Senate received the message and thanked the committee.

Election of President Pro Tem.

The chair announced that nominations for President Pro Tem of the Senate for the ensuing third called session were now in order.

Senator Dean placed in nomination for the office Senator A. C. Buchanan, of Bell County.

The nomination was seconded by Senators Dayton, Page, Williford, Faust, Sulter, Dudley, Hopkins, Hertzberg, and Rector.

The Lieutenant Governor appointed Senators Hopkins, Witt, and Rector as tellers and fifteen votes being cast for Senator Buchanan, and one vote for Senator Cousins, Senator Buchanan of Bell, was declared elected President Pro Tem. of the Senate for the third called session of the 36th Legislature.

The President appointed Senators Dayton, Alderdice, and Williford to escort the President Pro Tem. to the chair, whereupon he was administered the oath of office.

Messages From the Governor.

Here a messenger from the Governor appeared at the bar of the Senate with the following executive messages:

Governor's Office,
Austin, Texas, May 20, 1920.
To the Thirty-sixth Legislature in
Third Called Session.

There is a crisis in the school affairs of Texas which has prompted me to embrace the subject of making provisions for maintaining the public schools and the educational institutions of Texas during the scholastic term in my proclamation convening you in extraordinary session.

A serious handicap to the efficient operation of the University of Texas, the College of Industrial Arts, the Agricultural and Mechanical College and the State Normal Colleges is presented because of the unusual increase in the cost of education, growing out of conditions over which you have no control.

There is even a more acute situation with respect to the common schools of the State, since there has been an actual closing of the doors of many schools during the term now ending, while indications point to the closing of a much larger number of schools over the State during the next scholastic term, unless provision is made to maintain them.

You will be supplied with data and information bearing upon this highly important subject.

I requested a committee appointed by me to consider the matter of public schools and the higher institutions of learning, and give the same thorough consideration and submit recommendations with respect to that which is essential now for adequate support. This committee was composed as follows:

Dr. W. B. Bizzell, College Station; Miss Mamie Bastian, Houston; Miss Annie Webb Blanton, Austin; Dr. F. M. Bralley, Denton; J. C. Cochran, Gonzales; F. W. Cook, San Antonio; Lynch Davidson, Houston; C. E. Evans, San Marcos; L. J. Hart, San Antonio; J. A. Hill, Canyon; L. H. Hubbard, Belton; T. N. Jones, Tyler; D. E. Lyday, Fort Worth; E. R. Pedigo, Austin; F. C. Proctor, Houston; T. H. Shelly, Tyler; Charles G. Thomas, Lewisville; Leonard Tillotson, Sealy; Dr. R. E. Vinson, Austin; Miss Nellie White, Dallas; W. H. Bledsoe, Lubbock; H. P. Brelsford, Eastland; Richard F. Burgess, El Paso; R. M. Dudley, El Paso; and Chester Terrell, San Antonio.

The committee conducted the investigation and made recommendations,

and while I am not sufficiently acquainted with the findings of the committee or the basis upon which these findings rest to join in the recommendations made, I respectfully request that you give them consideration, and that you make full inquiry into the educational needs of Texas, with a view to averting inefficiency or inadequacy in the schools of Texas, from the highest to the lowest. Even if what is deemed fully adequate cannot be provided to meet the situation with the revenue at the disposal of the State, I trust there will be sufficient liberality on the part of the Legislature to provide, keeping within present revenues, whatever may be necessary to maintain instructors sufficient for all students seeking to enter the University, The College of Industrial Arts, the Agricultural and Mechanical college and the normal schools of the State, and to at least bring to a minimum the inadequacy of first class teaching talent for the public schools of Texas, and to prevent, if possible, the closing of any public schools in Texas during the next scholastic term.

Education is the only bulwark of free government, and the function of providing schools for all the children of all the people is the highest duty that devolves upon government.

Respectfully submitted,

W. P. HOBBY,
Governor.

Governor's Office,
Austin, Texas, May 20, 1920.
To the Thirty-sixth Legislature in
Third Called Session.
Gentlemen:

Pursuant to paragraph four of my initial message to you of this date wherein I advised that I would furnish you with all the facts and information in my possession with respect to the Pink Boll Worm situation, to be printed in your journals for the benefit of each member, I hand you herewith copies of the following documents taken from the files in this office.

(A) Recommendation bearing date of January 17th, 1920.

(B) Letter from Dr. C. L. Marlatt, Chairman of Federal Horticultural Board, dated February 7th, 1920.

(C) Notice of public hearing by the Department of Agriculture to consider the advisability of quarantining the state of Texas and Louisiana, dated March 18th, 1920.

(D) Letter from the Texas delegation in congress dated March 19, 1920.

(E) Statement issued by the Secretary of Agriculture of the United State of April 6th, 1920.

(F) Statement issued by the Secretary of Agriculture of the United States of April 10th, 1920.

(G) Recommendation of Pink Boll Worm Commission dated April 1, 1920.

(H) Minority report of E. B. Pickett, Jr., member of the Pink Boll Worm Commission, filed with the Secretary of Agriculture dated April 7th, 1920.

(I) Letter from Hon. Ben. F. Chapman, chief clerk of state department of Agriculture, dated May 11th, 1920.

(J) Report to the Governor of Texas on the Pink Boll Worm situation in Texas by Prof. E. J. Kyle, dean of the school of Agriculture, et. al.

Respectfully submitted,
W. P. HOBBY,
Governor.

"A"

Copy.
Houston, Texas,
January 17, 1920.

Hon. Fred W. Davis,
Commissioner of Agriculture,
Austin, Texas.

Dear Sir:—

We, the commission appointed under Section 15 of the Pink Bollworm Act of 1919 and each of us have investigated the pink bollworm situation in Harris County (similar statement made for each County represented) and have held public hearing duly advertised at Houston, Texas, at which meeting we have heard the testimony of inspectors and interested citizens, and have investigated the reports and affidavits covering the pink bollworm situation of the said county.

From the investigations made, and the testimony heard, we have reached the conclusion that under the circumstances the regulated cotton zone as proclaimed by the Governor on the 24th day of April, 1919, should be maintained for the crop season of 1920 under the present existing rules and regulations, with such additional regulations as the circumstances may demand.

We, therefore, recommend that the

line of the present regulated cotton zone of Harris County be maintained for 1920, and in any case when pink bollworms are found within five miles or less of the present regulated zone line that an additional ten miles be included beyond the present regulated zone line opposite such infestations.

Respectfully submitted,

(Signed) Ben F. Chapman, Chairman, Texas Department of Agriculture; W. D. Hunter, U. S. Department of Agriculture; H. J. Reinhard, Texas A. and M. College; K. M. Trigg, Jr., Appointed by the Governor of Texas; H. W. Barkuloo, Representing Harris County.

"B"

Copy.

United States Department of Agriculture,

Federal Horticultural Board,
Washington, D. C.
February 7, 1920.

Hon. W. P. Hobby,
Governor of Texas,
Austin, Texas.

Dear Sir:

The Federal Horticultural Board has been advised of the recommendations made by the Pink Bollworm Commission appointed under the Pink Bollworm Act of Texas of March 10, 1919, with respect to the areas in Texas quarantined on account of the pink bollworm of cotton. It is noted that the recommendations of this commission amount to an abandonment of the plan which has hitherto been followed of declaring noncotton zones to cover infested districts and a reduction to a five-mile strip of the border noncotton zone, which has been maintained for two years and which has hitherto included all of the counties of Maverick, Kinney, and Val Verde. The board realizes that local pressure and anticipated difficulties in the enforcement of non-cotton zones under the State law led to this decision and that such decision was really one of expediency and does not represent the judgment of the commission as to the best course to be pursued for the eradication of the pink bollworm.

In view of the possible far-reaching future effect of these recommendations, if adopted and acted upon, on the entire cotton industry of Texas and of the South, I am venturing to

bring to your attention the very strong feeling of this board with respect to this situation.

The board realizes fully that the continuation of a regulated zone in a region actually infested by the pink bollworm and bordered by vast cotton-growing areas of Texas, like that of the Trinity Bay district, would mean practically the abandonment of the effort to exterminate this insect. If such courses should be adopted, it would become a question whether the congress would be justified in continuing the appropriations to cover large scale clean-up work which would be constantly nullified by such growth of cotton in a district where it would be certainly infested. A regulated zone can do little more than restrict the spread of the insect and can not stamp it out, and would, therefore, mean the slow but inevitable spread throughout the cotton-growing States.

The losses which this insect is now causing in Egypt, in Mexico, and in Brazil indicate that such spread in the South would result in a tax on the cotton crop of this country, ultimately, of hundreds of millions of dollars annually. The best methods of control which have been devised in Egypt and elsewhere have not prevented a loss of approximately 20 percent of the crop, and many of these methods could not be enforced in this country on account of the expense under our higher labor costs.

The board is convinced that there is but one method by which the extermination of this pest in Texas may be accomplished, and that is by ceasing to grow cotton in infested districts for a period of two or three years. The results so far obtained strongly support the possibility of exterminating the pink bollworm by this method; for example, the insect has not reappeared in the Hearne district where a cotton-free zone has been maintained beginning with 1918. The single non-cotton year in the large Trinity Bay district was not sufficient, as shown by the reappearance of this insect throughout this district in the fall of 1919; on the other hand, the stopping of the growth of cotton in 1918, although not fully enforced, has reduced this insect to negligible numbers as compared with the conditions of 1917. It is known that some of the larvae can carry over in the seed

to the second year and, either by this or other means, the insect has maintained itself in this district. The recurrence of 1919, however, has been at fairly widely separated points throughout this district, and very few infested plants and larvae have been found. Such recurrence is significant chiefly in indicating that enough insects are still present in the district to develop within a few years full infestation and maximum damage, together with undoubted rapid spread to greater areas.

The results of the clean-up work of the winters of 1917-18 in the Hearne and Trinity Bay district and of 1918-19 in the Pecos district, together with the enforcement of non-cotton zones for two years at Hearne, and for one year in the Trinity Bay district, give strong reason to anticipate the ultimate extermination of the pink bollworm if the more radical plan of establishing noncotton zones where needed is continued. The abandonment of this plan would mean the loss of everything that has been gained, including the advantageous position we are now in. It would mean further that all the Federal and State moneys heretofore used for control work on the border and in Texas had been expended to no purpose.

Continuing to grow cotton in the Trinity Bay district under whatever regulations will simply mean the further spread of the insect and the considerable enlargement of the area infested, and make difficult if not impracticable the return later to the more radical action of enforcement of noncotton zones. At such time, even greater opposition may be anticipated from planters, and the same legal questions may come up for settlement so that nothing will be gained in these respects by postponing such action, and, moreover, a valuable opportunity of combatting a serious pest may be lost.

Under Federal funds this department, in cooperation with your State, is now completing a thoroughgoing clean-up of this district, which, in view of the slight infestation determined, puts the plan of extermination on a very favorable basis. The general planting of cotton this year would make a similar clean-up next winter vastly expensive and it is even doubtful in view of all the circumstances whether congress would be

willing to continue funds for such purpose.

This is a matter which interests not only the State of Texas, but all other cotton-producing States of the South and in view of the importance of this crop, is of National concern. The relinquishment of the full powers of control which the State has provided for by law and the consequent opportunity for the slow but constant spread of this pest must necessarily bring to the front this consideration of quarantine on the part of other States or of the Federal Government with respect not only to the areas actually infested, but probably also to the entire cotton output of Texas.

In view of this situation, this board strongly urges the State of Texas to maintain for the next two or even three years, if necessary, the Trinity Bay district as a non-cotton zone, and also to maintain the full county-wide noncotton zones on the Texas border with respect to such zones hitherto established, or any other similar zones which it may be necessary to establish later. As an aid to the carrying out of such action, the board urges that an active campaign of education be instituted to develop public sentiment not only in the district concerned, but throughout the State to support effective maintenance of such zones under the authority given in the Pink Bollworm Act.

The board urges further that the Pink Bollworm Commission be instructed to reconsider its recommendations with the understanding that the responsibility for the continuation or abandonment of the one opportunity for the extermination of this insect rests with the State authorities.

Yours very truly,
(Sgd.) C. L. MARLETT,
Chairman of Board.

"C"

Copy.

United States Department of
Agriculture.

Office of the Secretary
Federal Horticultural Board

Washington, D. C.,
March 18, 1920.

Notice of public hearing to consider
the advisability of quarantining the

states of Texas and Louisiana on account of the pink boll worm of cotton.

The Secretary of Agriculture has information that the pink bollworm (*Pectinophora gossypiella*), a dangerous insect new to and not heretofore widely prevalent within and throughout the United States, occurs at various points in Texas and Louisiana.

It appears necessary, therefore, to consider the advisability of quarantining the states of Texas and Louisiana in accordance with the Plant Quarantine Act of August 20, 1912 (37 Stat. 315), as amended by Act of Congress approved March 4, 1917 (35 Stat. 1134, 1165), and of placing such restrictions and prohibitions on the movement of these states of cotton lint, cotton seed, seed cotton, cotton seed cake, meal and all other cotton seed products, except oil, and providing for such inspection, cleaning and disinfection of railway cars and other vehicles and freight, express, baggage or other materials as a condition of interstate movement as shall be deemed necessary to prevent the spread of such means and agencies of the pink bollworm into other states.

Notice is therefore hereby given that a public hearing be held at the Department of Agriculture, Washington, D. C., room 11, Federal Horticultural Board, at 10 o'clock a. m., April 6, 1920, in order that any person interested in the proposed quarantine may appear and be heard in person or by attorney.

"D"

Copy.

Washington, D. C.,
March 19, 1920.

Hon. W. P. Hobby, Governor of Texas,
Austin, Texas.

My Dear Governor: We notice in the daily press of the 11th inst. that the pink bollworm commission adheres to its former plan of permitting cotton to be cultivated under prescribed regulations in that section of Texas infested by the pink bollworm, notwithstanding the fact that the Horticultural Board of the Department of Agriculture has determined that noncotton zones in infested areas is the only hope of exterminating this destructive cotton pest.

When we recall that in Asia, Africa, Brazil and the Hawaiian Is-

lands the pink boll worm annually reduces the lint yield from 20 to 50 per cent and cuts the oil bearing qualities of the seed very materially, that the minimum loss in India from this pest is more than ten million dollars annually, and that it caused the abandonment of cotton cultivation in Hawaii, where in 1915 the loss in lint was from 50 to 99 per cent, the decision of the pink boll worm commission is not only a distinct disappointment, but is extremely alarming. Practically all cotton growing areas of the world except the United States, are infested with the pink boll worm and the cotton production greatly reduced or destroyed. The United States is free from this tenacious insect scourge except small areas in South Texas. In these infested areas cotton planting and raising should be prohibited, and the State of Texas should compensate those who suffer a pecuniary loss thereby. This action should be taken immediately, and the State should provide funds to compensate those who may be prohibited from planting cotton in such infested areas. The House has just passed an appropriation of three hundred and eighty-five thousand dollars to aid the State of Texas in the extermination of this destructive pest, and Texas should do her part or must suffer the consequences, which are too terrible to contemplate. Texas, raising as it does, four million bales of cotton annually, the loss will be staggering if the pest spreads throughout the State.

Under the laws of our country, it is within the powers of the Department of Agriculture to quarantine in order to protect each state of the Union as far as it can, from infestation by injurious and destructive agricultural pests. Therefore, with the pink boll worm established in certain counties of Texas, the other cotton producing states may demand a quarantine against cotton shipments in interstate commerce, and it may be the Department of Agriculture will grant such a demand, unless we follow their recommendation and establish a cotton free zone in the infested areas. With this quarantine established, each bale of cotton shipped from Texas will have to be fumigated, which will cost three dollars per bale.

The risk we run is too great, the calamity we would be subject to is too severe to take the chances and

subject ourselves to the awful catastrophe which would be precipitated upon us by permitting them to plant cotton in such areas, when we should prohibit them from so doing, and pay them for the damage they suffer.

We permitted the boll weevil to enter our State without taking drastic steps to destroy it, and it has not only been a plague to Texas since then, but has spread over practically the entire cotton-growing south. Let us profit by experience.

The State should not hesitate to provide adequate funds to aid in exterminating the pink bollworm and maintain the cotton free zone along the border in order to avoid the greatest calamity that has ever threatened our welfare.

Sincerely,

Signed: C. A. Culberson, James Young, Rufus Hardy, J. P. Buchanan, Sam Rayburn, Tom Connally, John N. Garner, Marion Jones, Joe H. Eagle, Morris Sheppard, J. J. Mansfield, Lucian W. Parrish, Eugene Block, Thomas L. Blanton, Hatton W. Sumners, Carlos Bee, Fritz G. Lanham.

"E"

Copy.

U. S. Department of Agriculture
Division of Publications
Office of Information.

The pink boll worm situation

The Secretary of Agriculture today issued the following statement on the pink boll worm situation.

"The pink boll worm menace has been prominently before the State of Texas for the past four years, since its discovery in Mexico in 1916 and the determination of its presence over limited areas in Texas in the fall of 1919.

"The cotton and other interests of Texas are aware of the active effort that has been made by the Federal Government, in cooperation with the State, to eradicate the insect and to prevent its further entry from Mexico, and of the fact that Congress, during these years, has appropriated some \$1,400,000, the greater part of which has been expended in Texas for the prosecution of the work. Some \$600,000, for its continuation is provided in the bill making appropriation for the next fiscal year which is now pending in Congress.

Money Not Spared to Fight Pest.

"The campaign against the pink bollworm has included not only the clean-up of the infested areas at great cost to the Government, but also the maintenance of a border quarantine between the United States and Mexico, involving the control of all traffic between these two republics. Further than this, the Government has controlled the entry of foreign cotton, and has provided for its fumigation and disinfection at an expense of millions of dollars to the importers, this control extending even to the cotton mills and until the imported product is actually utilized in manufacture. There has been no halting as to appropriations or as to work to free Texas and other sections from the pink bollworm and to safeguard the United States from this new menace to the cotton crop and related industries.

"The control operations prevented the further entry of the pest from foreign sources, and, up to last year, brought Texas to a very favorable situation with respect to the possible ultimate extermination of the insect. It has already been practically eliminated from two, if not three, of the areas known to be infested in that State, and in the larger Trinity Bay area the clean-up was so thorough that not a single specimen was found during the season of 1918. The work at the end of 1918 was, therefore, in a most advantageous position and there was every reason to anticipate its early successful completion.

"Unfortunately, at the end of that season the planters in the large Trinity Bay District made strong demands that they should be permitted to grow cotton in 1919 under restriction—these demands being based on the success of the Federal clean-up operations and the apparent elimination of the pest. The experts of the department advised strongly against this plan, realizing that complete success could not be obtained except by the elimination of cotton culture for a period of two, or preferably three, years. Ultimately, however, the growth of cotton under restriction was allowed and the State Pink Bollworm Act was amended by the Legislature to make such course possible, but this was with the definite understanding by the Federal Department of Agriculture that, if the growth of cotton in the invaded district should result in the reappearance

of the pink bollworm in the district, the authorities of the State would promptly reestablish a non-cotton zone for all infested areas and maintain it for such period as might be determined to be necessary to complete the eradication of the pest. In this agreement, the Department was advised, the planters of the district also joined.

Importance of Noncotton Zones.

"The unfortunate but natural result of this resumption of cotton planting has been the scattered reappearance of the pink bollworm over the entire area formerly infested, with some extensions into new territories. The fact that the insect can live over to the second year in the larval stage probably largely accounts for the infestation of 1919, and this emphasizes the necessity of maintaining noncotton zones for a longer period, or probably for at least three years.

"This was the status of the work at the end of 1919. A new and very serious phase of the situation developed early in 1920 as the result of the failure of the State of Texas to carry out the program of control which had been promised if the insect should reappear in the quarantined and restricted district, namely, the reconversion of that district into a noncotton zone. This failure to act has been due to the strong opposition on the part of planters in the infested districts, and the apparent unwillingness on the part of the authorities to take the drastic action which the situation required.

"An added danger resulted also from the determination, early in February of this year, of the establishment of the pink bollworm in southwestern Louisiana, in the parishes of Cameron, Calcasieu and Jeff Davis. The reappearance of the insect in Texas and its discovery in Louisiana together present perhaps the most serious situation which has ever confronted the cotton industry of the United States, and unless the work which this situation necessitates can be promptly undertaken, both as to Louisiana and Texas, the results of the efforts at extermination already carried out in Texas will be lost and the pink bollworm will certainly get out of hand and become a permanent and very serious limiting factor in the production of cotton in this country.

Situation in Louisiana Favorable.

"Promptly following the discovery of the infestation in Louisiana, the authorities of that state established drastic quarantine prohibiting the growth of cotton in the infested parishes, and, at a recent convention held in New Orleans, steps were taken to secure a large state fund for the purpose of aiding in control work and, particularly, for the reimbursement of planters in the quarantined districts for the net losses due to the prohibition of the growth of cotton. The situation at the present time, therefore, as to Louisiana is on as favorable a basis as could be desired, and this department has every reason to expect thoroughgoing cooperation in the clean-up and control work. If this cooperation is maintained, it seems probable that the insect can be eradicated in that state within two or three years.

"Strong efforts have been made to secure similar cooperation on the part of Texas, such cooperation in fact as the state has hitherto given in the work. These efforts have included petitions and memorials to the Governor of Texas by the Texas Representatives in Congress, the Texas Board of Trade, and other important associations, and responsible citizens of the State, as well as definite and emphatic recommendations in letters and telegrams from this department. Similar recommendations have been made by the Pink Bollworm Commission created under the Texas Pink Bollworm Act of 1919.

"The one drawback to success now is the delay of Texas in establishing noncotton zones for the infested areas in that state, a delay which has already resulted in the planting of considerable portions of these areas to cotton. The destruction of this cotton later on, if authorized by the state, will simply mean that much greater cost to the state and the Federal Government.

"This department has urged, from the beginning, that, in view of the sacrifices made by the planters in the invaded district in the interests of the state as a whole, steps should be taken by the state to reimburse them for their net losses, following in this respect the example already set by Louisiana. It has pointed out, also, that the control of the pink bollworm is of vital interests to Texas, as well as to all other cotton-producing states, and that the prompt exter-

cise on the part of Texas of the full powers given in the Pink Bollworm Act of 1919 of that state would do much to limit the need of drastic quarantine action, both State and Federal, which otherwise will undoubtedly have to be taken. Such state action, in fact, has either already been taken or is being contemplated by most of the other cotton-growing states.

Extermination Depends on Prohibition of Cotton.

"The strongest emphasis has been placed on the fact that the extermination of the insect in Texas and Louisiana is absolutely contingent on the prohibition of the growth of cotton in infested areas. The growth of cotton under restrictions, or the adoption of other methods of control, will simply mean the perhaps slower, but no less certain, ultimate spread of the pest. It has also been emphasized that extermination is possible only under present conditions—in other words, when the infestation is just beginning and when the insect is scanty in numbers and limited in distribution. Any postponement or limitation, therefore, of the effort at this time would mean practically the loss of the opportunity of extermination and an acceptance of the ultimate spread of the pest throughout the South. Furthermore, it has been strongly indicated that success in the eradication effort necessarily requires the complete cooperation of the States involved in the measures outlined, and that, if the effort should fail through any halting in the work or any limitation on the methods which alone can bring success, the responsibility therefor will rest upon the persons or communities concerned.

"The department is advised that the interests in Texas related to cotton production and utilization are, for the most part, strongly in favor of the program of extermination and of provision by the State for such compensation as may be just to the planters in the districts which will be directly affected by the prohibition of the growth of cotton. It is also advised that the normal production of cotton in these districts represents only about 1 per cent of the total production of the State and that, on account of unfavorable climatic conditions, a profitable crop is secured only once in two or three years. It recognizes that opposition to the proposed prohibition on

the part of those affected is natural and, furthermore, that it has been intensified by the fact that, whereas the Texas law provides for compensation for crops destroyed in the control operations, the State has made no definite appropriation for that purpose and no reimbursement has been made for such losses. This situation strongly emphasizes the necessity of prompt action by the State to make provision for the reimbursement of those farmers whose sacrifices, as already indicated, are for the general welfare of the State and of the cotton industry.

Pink Bollworm Worst Cotton Pest.

"There have been many misstatements about the pink bollworm and its importance which have resulted from propaganda against any control work whatsoever with respect to it. The most important of these statements are that the insect is an old and well known cotton pest in Texas and throughout the South, and that it is comparatively unimportant in its effect on the cotton crop, or that, granting perhaps that we have a new pest in the pink bollworm, it at least has not occasioned any damage to the cotton crop in Texas or elsewhere and is a negligible factor.

"The contention that the pink bollworm is an old and well known enemy of cotton, so far as it is based on an honest belief on the part of planters, is due to the confusion of this insect with the old-time bollworm of cotton, known also as the corn earworm, and perhaps with a number of other native worms, which occasionally bore into the bolls of cotton. That the pink bollworm is an entirely different insect and actually exists in the district in question is based on adequate and conclusive determination by the experts of this Department and of the Division of Insects of the National Museum at Washington. The history of the insect also is well known—its origin in India, its spread to Egypt, and from thence, with seed distributed over the world for planting, to practically every other cotton-growing country. The enormous losses which it is now causing in Egypt, Brazil, Mexico, the Hawaiian Islands, China, etc., are also matters of official estimates and records.

"The second contention, namely, that the pink bollworm has caused no loss to the cotton crop of Texas, is essentially correct, but it cannot be properly urged as an argument against

any control work. That the insect has done little or no damage so far is due largely to the expenditure by the Federal Government of nearly a million and a half dollars in clean-up and other control work, and the fact that the pest is just beginning to get a foothold in Texas, and, on account of such control and its recent introduction, has not yet reached numbers sufficient to cause serious losses. It must be borne in mind that the invasion is now at a stage where extermination is possible and that this opportunity will have passed completely if the effort at control is stopped, or materially lessened, until the insect has become widespread and has had time to bring about, to any degree, the maximum amount of damage which it has caused in other countries and which it will undoubtedly ultimately cause in Texas and elsewhere in the South if it is not exterminated.

Responsibility of Texas.

"The success, therefore, of the work of extermination, which Congress has so liberally supported, is contingent on the action of the States concerned. Louisiana has undertaken to do what ought to be done under the circumstances. It remains for the executive and other authorities of Texas to determine whether this cotton pest shall be given the opportunity to overrun the State, and ultimately the South, or whether the campaign of eradication shall go on efficiently with the promise of success which is so encouraging from the work already carried out. This responsibility cannot be shifted. The situation has become much more serious on account of the failure of Texas to act under its law and under the authority already granted by the legislature, but it is not too late to retrieve some or most of the damage which this failure has occasioned.

"The necessity at this time is the immediate declaration of non-cotton zones for the infested areas of Texas, so as to require the plowing up of the fields already planted and to stop further planting in such areas; and, in connection with this action, the taking of such steps as may be necessary to give assurance to the planters concerned of ultimate reimbursement by the State for their losses.

"The department is advised that the Governor of Texas has agreed to communicate with all the members of the legislature with a view to secure their

pledges to vote for a compensation measure at a special session to be convened within sixty days. He has also agreed to issue the necessary non-cotton zone proclamation if the Pink Bollworm Commission of the State so recommends. The Commission held a general hearing at Houston, Tex., on March 31 and the determination of a noncotton zone for the infested territory during the year 1920 on the basis of compensation to the farmers within the district. It is hoped that this recommendation will be put into effect promptly so that there may be complete cooperation between the department and the State and the effort to eradicate the pink bollworm may be vigorously carried out."

"F"

Copy.

U. S. Department of Agriculture
Division of Publications
Office of Information

Federal and State Quarantine Action With Respect to the Pink Bollworm.

As a result of the hearing conducted April 6 and 7 by the Federal Horticultural Board of the United States Department of Agriculture on account of the pink bollworm, and after consultation with the Governor and other authorities and representatives of the State of Texas, and with official and other representatives of the State of Louisiana, the Federal Horticultural Board will recommend to the Secretary of Agriculture the following quarantine and restrictive action to be enforced by these States in cooperation with this department with the object of preventing the further spread and effecting the extermination of the pest. The prompt carrying out of these plans has been definitely promised by the official representatives of these States.

Quarantine and Restrictive Action As to Texas.

1. The State of Texas will establish and enforce a noncotton area covering the regulated zone now in effect in southeastern Texas with certain additions to include new points of infestation which have been determined outside of the old quarantine line. This zone involves all or portions of the Counties of Jefferson, Chambers, Galveston, Brazoria, Harris, Liberty, Fort Bend, Jasper and Newton.

2. In addition to and surrounding this noncotton area as a further factor

of safety, the State of Texas will establish and enforce a regulated zone of 25 miles in width. The growth of cotton in such regulated zone will be permitted under the restriction that the crop shall be under the full control of the State authorities in cooperation with the United States Department of Agriculture for the purpose of enforcing any safeguards that shall be determined to be necessary.

3. The State of Texas will establish similar regulated zones of a ten-mile radius surrounding all oil mills in Texas which are known to have received seed during the last three years from the parishes in southwestern Louisiana now known to be invaded by this pest. Such points in Texas are now known to include Houston, San Antonio, San Marcos and Snyder.

4. In addition it is understood and agreed that the State of Texas will maintain and continue the non-cotton zone established for the last two years at Hearne, Texas, and the noncotton zone established for 1918, including the counties of Presidio and Brewster, in the Great Bend of the Rio Grande; and will continue the quarantine with respect to Valverde, Kinney and Maverick counties on the basis of a noncotton zone, extending inward five miles from the Mexican Border of these counties and the inclusion in a regulated zone of the portion of these counties outside of such border zone in which all cotton produced will be under the control of the State authorities in cooperation with the United States Department of Agriculture as in the case of other regulated zones.

The Governor of Texas has agreed for the State to promulgate immediately the noncotton zones indicated and to take steps for the prompt establishment of the restricted zones referred to. He has further stated that he will convene the State legislature in extraordinary session during May for the purpose of making such amendments as may be necessary to the Pink Bollworm Act of the State to carry out the action indicated and to make provision by specific appropriation of State moneys for the reimbursement of planters in the noncotton zones for the losses which they may sustain as a result of the prohibition of the growth of cotton and for the reimbursement of such planters for cotton actually produced in 1919 and which has already been destroyed in

control operations with respect to the pink bollworm.

**Quarantine and Restrictive Action
as to Louisiana.**

1. The State of Louisiana will establish and enforce as a noncotton area all of the Parishes of Cameron, Calcasieu and Jefferson Davis. Inasmuch as these parishes include a considerable area beyond known infestation, the requirement of a regulated zone surrounding these parishes is deemed unnecessary.

2. The State of Louisiana will establish a regulated zone of a ten-mile radius surrounding all oil mills in Louisiana which are known to have received seed during the last three years from the parishes of southwestern Louisiana now known to be invaded by this pest. Such points in Louisiana are now known to include Shreveport, Monroe, Bunkie, Alexandria, Broussard, Eunice and Gretna.

The Governor and other authorities of Louisiana have already taken steps to provide and enforce such noncotton zone and also for the reimbursement of the losses of planters in such zone as a result of this action.

**Proposed Quarantine Action by the
U. S. Department of
Agriculture.**

The execution of this agreement and plan of action arrived at by the Federal Horticultural Board of this Department and the official representatives of the States of Louisiana and Texas will make it possible, the Secretary of Agriculture states, to limit the Federal quarantine to the noncotton and the regulated zones described as to these two States. This action will be supplemental to the State quarantines and for the purpose of giving Federal authority and aid in their enforcement.

It will place no restrictions on the movement interstate of cotton and cotton products out of the sections of Texas and Louisiana not included in the quarantined districts; in other words, the districts actually known to be invaded by the pink bollworm and the districts which have been placed under regulation on account of contiguity to such districts or suspicion of possible infestation through movement of cotton seed. It is believed that it will be possible to discontinue many if not all of the regulated

zones about oil mills in Texas and Louisiana which are under suspicion on account of having received seed from the invaded districts in Louisiana should the thorough inspection of the season of 1920 show absence of invasion by the insect at these points.

Cotton Products Included.

It is proposed that these quarantines and restrictions covering movement of products out of the noncotton and regulated zones of the States of Texas and Louisiana shall apply to all cotton products other than oil, including seed cotton and cotton lint—baled or unbaled—cotton seed, cotton seed hulls, cotton seed cake and meal, and bagging and other containers that have been used with respect to cotton, and shall include also provision for such inspection and cleaning of cotton carriers, vehicles, etc., as may be necessary to prevent the accidental transportation of cotton seed.

The Department believes, and has been tentatively so advised, that this action on the part of Texas and Louisiana as cooperated in by the Federal Department of Agriculture will make it possible for the other cotton States of the South which have already issued quarantines or are contemplating issuing such quarantines against Texas and Louisiana on account of the pink bollworm to accept the Federal quarantines as fully meeting the needs, or at least to limit such quarantine action to the areas and products covered by the Federal quarantine and by the quarantines promulgated by the States of Texas and Louisiana.

"G"

Copy.

Houston, Texas,
April 1, 1920.

**Recommendation of Pink Bollworm
Commission.**

Hon. Fred W. Davis, Commissioner
of Agriculture, Austin, Texas.

We, the Pink Bollworm Commission as provided for by the Pink Bollworm Law of Texas, have in compliance with the law held a public hearing in the city of Houston on March 31st and April 1st, 1920, for the purpose of determining what action should be taken with reference to the area infested by the Pink Boll-

worm, which territory is defined as Zones 2 and 3, as described in a proclamation by the Governor, bearing date of April 24th, 1919, embracing all or parts of Galveston, Brazoria, Harris, Chambers, Jefferson, Hardin, and Liberty Counties, and some additional infested territory in Harris, Orange, Jasper and Newton counties.

We believe the nature of the infestation within the area above described is of such a nature as to require quarantine regulations. Therefore, we recommend that a non-cotton zone embracing the aforementioned territory be proclaimed for the year 1920 and including an area five miles beyond the outermost known places of infestation.

Provided, however, that such zone be dependent upon provision being made to pay for all cotton heretofore destroyed by process of law within this territory, and further dependent upon adequate provision being made to fully indemnify the farmers of the aforesaid mentioned territory for the losses they may sustain by reason of the fact that they are not allowed to plant, cultivate and harvest cotton. Until such time as provision is made for such compensation, the regulated zone as now constituted shall remain in full force and effect.

(Signed): C. W. Minson, Galveston County; John F. Hargraves, Chambers County; W. H. Nichols, Brazoria County; H. W. Barkuloo, Harris County; R. E. McDonald, State Department of Agriculture; M. C. Tanquary, A. and M. College; W. D. Hunter, U. S. Department of Agriculture; K. M. Trigg, Jr., appointee of the Governor; J. C. Eisentraut, Jefferson County.

This is to certify that the above is a true and correct copy of the recommendation of the Pink Bollworm Commission of said date.

R. E. McDONALD.

Subscribed and sworn to before me this the 13th day of April, A. D. 1920.

(Sgd.) J. R. GRANBURY,
Notary Public.

"H"

Copy.

Liberty, Texas, April 7, 1920.
Hon. Fred W. Davis, Commissioner
of Agriculture, Austin, Texas.

Dear Sir: As a member of the so-

called Pink Bollworm Commission which met in Houston, Texas, on the afternoon and night of April 1st, 1920, representing Liberty County upon such commission, I file this as a minority report upon the question then being considered by said Commission, and in opposition to the recommendation made by a majority of such Commission, to-wit:

/ 1.

The preamble or introductory portion of said recommendation reads: "We, the Pink Bollworm Commission as provided by the Pink Bollworm Law of Texas, have, in compliance with the law, held a public hearing in the City of Houston on March 31 and April 1, 1920." I would not subscribe to such a statement, because I am positively of the opinion that this so-called Commission was not a legal body, was not sitting "as provided by the Pink Bollworm Law of Texas", and that said meeting was not held "in compliance with the law". Therefore, I am of the opinion that the proceedings of the so-called commission are null and void.

And further the said recommendation of the majority reads: "We believe the nature of the infestation within the area above prescribed is of such a nature as to require quarantine regulations. Therefore, we recommend that a noncotton zone embracing the aforementioned territory be proclaimed for the year 1920." First, I doubt if the alleged infestation is of such a nature as to require any quarantine regulations and this opinion is based upon information which I have gathered from the statements and sworn testimony of persons who are held out as being expert entomologists. And secondly, the facts, in my judgment, do not justify the establishment of a noncotton zone in any part of the area included in the above reference.

2.

As a minority of such Commission, recommend that the regulated zones within the several counties affected, as established in the early part of this year (in January I think it was) and now in force, be allowed to remain as now constituted, and this recommendation is based upon the various facts and statements which said board heard and listened to, and after the same were by me carefully considered.

3.

I am thoroughly convinced that this alleged infestation can be controlled by the existing regulated zones, and that there is no foundation for the exaggeration which has been scattered broadcast relative to this alleged pink bollworm discovery, and that the excitement and fear produced in the minds of the people unacquainted with the truth of the situation, could be easily and entirely dispelled if those who are so excited and in a state of fear could be made acquainted with the facts as they actually exist in this county and in other nearby counties involved in this controversy.

Respectfully submitted.

(Sgd.) E. B. PICKETT, JR.

This is to certify that the above is a true and correct copy of the recommendation of the Pink Bollworm Commission of said date.

(Sgd.) R. E. McDONALD.

Subscribed and sworn before me this the 13th day of April, A. D. 1920.

(Sgd.) J. R. GRANBURY,
Notary Public.

"I"

Department of Agriculture, State
of Texas, Austin.

May 11, 1920.

Hon. W. P. Hobby, Governor of
Texas, Capitol.

Dear Governor: In response to your request of last Saturday, I submit the following history and statements with reference to the Pink Bollworm. You possibly may select from what is said herein some material to incorporate in your message on this subject to the Legislature.

The first published report or record of the Pink Bollworm of cotton according to Dr. W. D. Hunter, member of the Federal Horticultural Board, Washington, D. C., is a paper presented to the Entomological Society of London on June 6, 1842, entitled "Description of a Species of Moth Destructive to the Cotton Crops of India", by W. W. Saunders, a distinguished English entomologist. This is the same insect now known as the pink bollworm which is causing so much concern in practically all of the cotton producing countries.

It was not until the early part of the present century that the insect received close attention, and since

that time several bulletins and reports have been published upon its habits and distribution.

From published reports it seems certain that India and possibly Southern Asia are probably the original home of the pink bollworm, where its food consisted of the wild and cultivated cotton of those countries. It seems to be the opinion of some that the natural range of the insect extended to Central Africa, but did not reach the Nile Valley until 1906 and 1907. The first authentic record of the insect as a serious cotton pest in Egypt dates back to 1911, and it has since that time destroyed a large portion of the yearly cotton crop of that country, in spite of the expensive efforts of that government to control it.

It would seem that our hemisphere became infested at two places simultaneously, viz: In Brazil in 1911 and in Mexico the same year, and in both cases imported Egyptian cotton seed seemed to be responsible for the infestations. The infestation in Mexico, however, was not known to our Government until 1916.

The latter infestation, which concerns us mostly, can be traced to two shipments of Egyptian cotton seed, 125 sacks planted near Monterey in the State of Nuevo Leon, and six tons planted in the vicinity of San Pedro in the southwestern part of the State of Coahuila in a large basin-like section known as the Laguna. Recent investigations have determined that the worm exists in several other communities in Mexico.

The first infestation in Texas was found at Hearne, Robertson County, on September 3, 1917, and later findings developed in the counties of Jefferson, Hardin, Liberty, Chambers, Harris, Galveston, Brazoria, Orange and counties in the Trinity Bay District of Texas. Recent infestations have also been found in Presidio, Brewster, Ward and Kinney counties in the Western part of the State.

The present known range of this serious cotton insect is therefore as follows: East Africa, West Africa, Egypt, Nigeria, Zanzibar, India, Asia, Bengal, Ceylon, Burma, Straits Settlements, China, Phillipines, Hawaii, Brazil, Mexico, Texas and Louisiana.

Inspection work in badly infested cotton fields of Texas, revealed to entomologists that in some cases practically every seed was destroyed by the pink bollworms. Where bolls

were attacked early an inferior grade or no lint was formed.

With reference to the damage in other countries the following is quoted from Dr. W. D. Hunter's Department bulletin No. 723, Page 5:

"In the first place it destroys a certain number of the bolls or portions of bolls, in which case the lint produced is short and kinky. The injury, however, does not end with the reduction in the yield on lint. The crop of seed is correspondingly reduced, and what is obtained is of light weight and poor grade. In the crushing of Egyptian seed in England it was found that the oil content was lower than normal about 20 per cent and that the oil actually was of a dark color and of comparatively low value. The work of the insect is also of importance in connection with seed for planting. The percentage of germination is naturally low and much larger quantities must be planted to secure a stand.

"It is evident from what has been said that the pink bollworm must be of interest to all classes of persons concerned in the cotton trade as well as to those engaged more especially in the cultivation of the crop and the utilization of the seed.

"The most accurate information concerning the damage by the pink bollworm is in a recent paper by L. H. Gough. This investigator conducted studies in lower and middle Egypt to determine the number of bolls attacked by the pink bollworm. The samples consisted each of 100 green bolls taken at random in fields of various localities. These samples were sent to Cairo where they were given a very careful examination. The total number of bolls examined in this work was 106,400, and the examinations were continued from July to November. The following are the results of this investigation:

'Percentage infested during July, less than 10.

'Percentage infested during August, from 10 to 25.

'Percentage infested during September, from 25 to 75.

'Percentage infested during October, from 75 to 89.'

"These figures show in a very striking manner the damage of which the pink bollworm is capable. They may be taken as a fair indication of the injury which would be done in the United States, as the seasonal conditions here are similar to those in

Egypt. In short, they show that approximately 25 per cent of August bolls and 50 per cent of the September bolls would be destroyed or rendered practically valueless by the insect. They further illustrate the rapid increase of infestation of green bolls with the advance of the season, and indicate the possibility of a high reduction of yield, particularly in all late-maturing cottons where the second and third pickings are of importance. Fortunately for Egypt, one of the principal varieties of cotton grown there, the Sakellarides, matures its early crop and yields most of its cotton with the first picking. In spite of this favorable condition, however, and of expensive control operations enforced by the Government, a very conservative estimate by experts indicates a loss of at least 17 per cent to the Egyptian crop due to this insect. In the Hawaiian Islands the pink bollworm has prevented the development of the cotton industry which at one time showed considerable promise. With relation to German East Africa a statement is made that the pest normally becomes so abundant in two or three years after its introduction in the field as to necessitate abandoning the crop.

"In Brazil the Minister of Agriculture recently has collected data for an estimate of the damage to the cotton crop caused by the pink bollworm by addressing communications to the governors of the principal cotton producing states of the Republic. The following is a summary of the results of this investigation:

Losses on Account of Pink Bollworm in Brazil: Crop of 1917.

Brazilian State	American Currency
Maranhac	\$ 750,000.00
Piauhv	500,000.00
Ceara	10,000,000.00
Rio Grande de Norte....	2,500,000.00
Parahyba	5,925,000.00
Pernambuco	5,750,000.00
Alagoas	1,575,000.00

"The loss referred to in the table ran from 30 per cent of the crop in the State of Alagoas to two-thirds of the crop of 30,000 metric tons, in the State of Ceara.

"In Mexico the actual injury caused by the pink bollworm was investigated by the Joint Commission representing the Mexican and American commission. This commission visited many places or plantations in the Laguna in 1917. It reported that the

loss to the crop of 1917, chargeable to the pink bollworm was not less than 30 per cent. Mr. August Busck, who was a member of the commission, personally estimated losses ranging from 30 to 50 per cent with individual fields showing even higher losses."

In a letter to his field men under date of December 10, 1918, Dr. Hunter gives this information:

"The November issue of the Boletín de la Cámara Agrícola Nacional de la Comarca Lagunera contains an important article of the losses caused by the pink bollworm in Mexico. A summary of these losses is given below, as it furnishes a number of valuable talking points which can be used in interviews with farmers:

"By data very close to the truth, it is estimated that the actual cotton crop amounts to 120,000 bales, and according to the opinions of most authorities, the worm destroys 25 per cent of the total crop, that is to say, the 120,000 bales produced is only three-fourths of the crop which should be harvested.

"Below we give the losses represented by 40,000 bales:

Losses to Agriculture.

200,000 quintals equal	
40,000 bales of lint....	\$12,000,000.00
This quality of fibre would produce 18,408 tons of seed at	1,104,408.00
Total	\$13,104,408.00

Deductions.

Picking of 27,612,000 kilos of seed cotton.....	\$ 1,104,480.00
Ginning of 200,000 quintals	460,000.00
Administration	200,000.00
Freight to Mexico City on 200,000 quintals of lint	322,000.00
Freight on 18,408 tons of seed	14,400.00
Total Deductions ...	\$ 2,100,880.00

Net loss to planter.....\$11,003,600.00

Losses to Employees.

Picking 27,612 kilos of seed cotton	\$ 1,104,480.00
Administration expenses.	200,000.00
Salaries of employees in the gins, mills, etc....	400,000.00
Total	\$ 1,704,480.00

Losses to Railroads.

Freight on cotton.....	\$ 322,000.00
Freight on seed.....	14,400.00

Total\$ 336,400.00

Losses to States of Coahuila and Durango.

Tax on cotton seed at \$3.00 per ton	\$ 52,224.00
--------------------------------------------	--------------

Losses to Federal Government.

6 % of the State taxes...	\$ 33,134.00
Ad valorem tax on lint..	60,000.00
Ad valorem tax on seed..	5,522.40

Total\$ 98,656.40

"The above figures do not take into account that in cases of more than one sale of cotton or seed the taxes would be correspondingly increased, nor do they consider the profit which would accrue in the manufacture of the 40,000 bales of lint and the corresponding amount of seed.

Losses in Local Business.

"Supposing that each planter keeps his proportion of the loss of eleven odd million dollars (which, since he has not lost it, really constitutes a gain), this amount, at least the \$1,700,000.00 paid to employees should have passed into local commerce, producing corresponding benefits and notable increase in prosperity of the district.

"And how much would the industries which manufacture the fibre and the seed gain, and how much would have passed into the hands of the laborers of these industries if it were not for the pink bollworm?

"This enormous loss is only that in connection with the crop of this year. How long will it continue?"

Investigations made during 1919 in the Laguna district covering the whole of the growing season of the cotton crop up until it was harvested, show that about 20 per cent of the total production of bolls were lost. It will be noted that Laguna lies in a more southerly latitude than the cotton belt of the United States, but due to the altitude it has a temperature very similar to that of the southern half of the cotton producing section of Texas. It has an annual rainfall of about eight inches and must depend upon irrigation for the balance of its moisture.

No experiments have been made on a large scale in the United States to

determine the effect of our climate upon the life of this insect. Ever since the pest has been known to exist in Mexico, the State and Federal governments have persistently combatted its introduction and spread into the United States. Therefore by the expenditure of large sums of money in efficient control work the worm has not been allowed to do any considerable damage to the cotton crop of this country.

In Hawaii, which is a very humid section, the cotton production has been abandoned except in one small island on account of the ravages of this pest. In Mexico and Egypt where we find extreme dry seasons, destruction has ranged from 15 to 60 per cent of the crop.

The South produces about 12,000,000 bales or 100 times as much as reported from the Laguna district. If the pest should become established throughout the cotton producing section of the South, and its damage here was equal to that quoted above from Laguna, then the loss to the cotton industry would be more than one billion dollars annually.

The introduction, spread and ravages of the Mexican Boll Weevil covering a period of the last twenty years, should serve as an object lesson to invite the earnest and serious consideration of the most effective methods to check, control and eradicate this new pest, that are available. It is very probable and in fact admitted by leading southern entomologists that the boll weevil could have been stopped in its spread by the establishment of noncotton zones soon after he made his first appearance in Duval County, Texas. It is to be hoped that the pink bollworm will never establish itself throughout the cotton growing territory and add its destruction annually to that wrought by the weevil and the numerous other insects and climatic conditions.

Yours respectfully,
BEN. F. CHAPMAN,
Chief Clerk.

J

REPORT TO THE GOVERNOR OF TEXAS ON THE PINK BOLLWORM SITUATION IN TEXAS.

By Prof. E. J. Kyle, Dean of the School of Agriculture, Mr. T. O. Walton, Director of Extension, Mr. A. B. Conner, Acting Director of the Texas Agricultural Experiment Sta-

tion, Dr. J. O. Morgan, Professor of Agronomy, Mr. A. Leidigh, Agronomist in the Experiment Station, Dr. M. C. Tanquary, State Entomologist and Chief Entomologist of the Experiment station, Mr. S. W. Bilsing, Professor of Entomology, Mr. H. M. Eliot, Chief of the Division of Farm and Ranch Economics in the Experiment Station, Mr. W. B. Lanham, Assistant Director of Extension, Mr. P. K. Whelpton, Professor of Farm Management, of the Agricultural and Mechanical College of Texas.

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The pink bollworm—life history of this insect; areas of infestation; extent of its ravages in the several countries; possibilities of eradication and preventing reintroduction into the country.

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Report of the Pink Bollworm Situation in Texas.

Part 1.

The Pink Bollworm.

Importance as a world-wide cotton pest. Brief history of spread in cotton countries and effects in each.

"The pink bollworm (Gelechia) Pectinophora gossypiella Saunders.

is one of the most destructive cotton insects known and ranks among the half dozen most important insect pests of the world. It occurs in the cotton districts of Asia, Africa, and the Hawaiian Islands, its ravages in these regions amounting to more than those of all other cotton insects combined. The pink bollworm repeatedly reduces the yield of lint 50 per cent or more and materially lessens the amount of oil obtained from the seeds. The minimum yearly loss from this insect in Egypt is estimated at 10 per cent of the value of the crop, but normally much more damage is done by it. Maxwell-Lefroy states that the minimum loss in India is more than \$10,000,000 annually. In the Hawaiian Islands the cultivation of cotton has practically been abandoned on account of this pest, which, during 1915, infested from 50 to 99 percent of the bolls in the few fields yet remaining and destroyed from one-half to nine-tenths of the lint."—From Busch.

The first published record of the pink bollworm was in 1842 by an English entomologist, W. W. Saunders. He received that year specimens of what was reported as a very destructive cotton insect from the superintendent of the government cotton plantations at Broach, India. Nothing further was published on this insect until 1904 when J. Vosseler wrote an article regarding the great injury done by the insect in German East Africa. Several other articles about the pest in that country appeared during the next few years. In 1909 Dr. D. T. Fullaway of the Agricultural Experiment Station at Honolulu published an account of the pink bollworm and its relation to cotton culture in the Hawaiian Islands, stating that it appeared to have been introduced from India within a very few years. Since that date quite a number of papers have appeared on the subject.

The original home of the insect is supposed to be Southern Asia and its original host plants were the wild and cultivated cotton of that region. The occurrence of the insect in Egypt is apparently traced definitely to large shipments of seed cotton or imperfectly ginned cotton from India in 1906-07, and the spread of the insect from the points in the lower delta near Alexandria where this cotton was sent from re-ginning, through-

out the delta and ultimately throughout Egypt is so circumstantial as to leave no doubt of the entry of the insect at that time into Egypt. The insect was first noted in Egypt in 1911 and the first severely infested fields, one near Alexandria, was noted in 1912. The increase of the damages from this insect in Egypt has been steady since 1912, and this in spite of the very laborious and expensive control operations enforced by the Egyptian government.

The present known range of the insect outside of this country as given by Hunter in East Africa, West Africa, Egypt, Nigeria, Soudan, Zanzibar, India, Bengal, Ceylon, Burma, Straits Settlements, China, Philippines, Hawaii, Brazil, and Mexico. The introduction into Brazil and Mexico is very recent and the available records show very clearly how it was accomplished. It seems that in the years 1911, 1912, and 1913 the government of Brazil imported nine tons of Egyptian cotton seed and that this seed was sent to agricultural inspectors and by them was distributed further throughout the cotton-growing districts. The insect was introduced into Mexico in 1911 by two importations of Egyptian seed.

Nature and Amount of Damages.

"The pink bollworm affects cotton production in several ways. In the first place it destroys a certain number of bolls or portions of bolls, in which case the lint produced is short and kinky. The injury, however, does not end with the reduction in the yield of the lint. The crop of seed is correspondingly reduced, and what is obtained is of light weight and poor grade. In the crushing of Egyptian seed in England it was found that the oil content was lower than normal by about 20 per cent, and that the oil actually secured was of dark color and comparatively low value. The work of the insect is also of importance in connection with seed for planting. The percentage of germination is naturally low and much larger quantities must be planted to secure a stand.

"It is evident from what has been said that the pink bollworm must be of interest to all classes of persons concerned in the cotton trade as well as to those engaged more especially

in the cultivation of the crop and the utilization of the seed.

"The most accurate information concerning the damage by the pink bollworm is in a recent paper by L. H. Gough. This investigator conducted studies in lower and middle Egypt to determine the number of bolls attacked by the pink bollworm. The samples consisted of each of 100 green bolls taken at random in fields in various localities. These samples were sent to Cairo where they were given a very careful examination. The total number of bolls examined in this work were 106,400 and the examinations were continued from July to November. The following are the results of this investigation:

Percentage infested during July, less than 10.

Percentage infested during August, from 10 to 25.

Percentage infested during September, from 25 to 75.

Percentage infested during October, from 75 to 89.

These figures show in a very striking manner the great damage of which the pink bollworm is capable. They may be taken as a fair indication of the injury which would be done in the United States, as the seasonal conditions here are similar to those in Egypt. In short, they show that approximately 25 per cent of August bolls and 50 per cent of the September bolls would be destroyed or rendered practically valueless by the insect. They further illustrate the rapid increase of infestation of green bolls with the advance of the season, and indicate the possibility of a high reduction of yield, particularly in all late maturing cottons where the second and third varieties of cotton grown there, the Sakellarides, matures its crop early and yields most of its cotton with the first picking. In spite of this favorable condition, however, and of expensive control operations enforced by the government, a very conservative estimate by experts indicates a loss of at least 17 per cent to the Egyptian crop due to this pest. In the Hawaiian Islands the pink bollworm has prevented the development of the cotton industry which at one time showed considerable promise. With relation to German East Africa, a statement is made that the pest normally becomes

so abundant in two or three years after its introduction in the field as to necessitate abandoning the crop.

"In Brazil the Minister of Agriculture recently has collected data for an estimate of the damage to the cotton crop caused by the pink bollworm by addressing communications to the governors of principal cotton-producing states of the republic. These data show the losses to the cotton crop in Brazil for the year 1917 to amount to \$34,000,000.

"The loss referred to in the table ran from 30 per cent of the crop in the State of Alagoas to two-thirds of the crop, or 30,000 metric tons, in the State of Ceara.

"In Mexico, the actual injury caused by the pink bollworm was investigated by the joint commission representing the Mexican and American commissions. This commission visited many plantations in the Laguna in 1917. It reported that the loss to the crop of 1917 chargeable to the pink bollworm was not less than 30 per cent. Mr. August Busck, who was a member of the commission, personally estimated losses ranging from 30 to 50 per cent with individual fields showing even higher losses."—From Hunter.

The Insect and Its Life History.

The parent of the pink bollworm is a small dark brown moth bearing a close resemblance to the ordinary clothes moth, having a wing spread of about three-fifths to four-fifths of an inch. The eggs are laid on the flowers and hatch in from four to twelve days. It has been estimated that a female may deposit about one hundred eggs. The larva, upon hatching, bores its way into the boll. The food of the larva is the seed within the boll. During the summer season the larva stage is from 20 to 30 days, but this may be greatly prolonged, sometimes lasting over two growing seasons. The pupa stage lasts from 10 to 20 days.

The entire life from the laying of the egg to the next egg-laying may be accomplished, under favorable conditions, in 35 days, but 40 to 50 days is the more common period even in mid-summer, and in the colder months the life cycle may extend over three or four months. Thus, 4, 5, or even 6 overlapping generations may be produced in a year.

The winter is passed in the larva stage in the seed. Busck found all stages of the insect to be present in Honolulu on May 18.

Possibility of Eradication and of Preventing Re-introduction Into This Country.

Cotton is the chief and favorite food plant of the pink bollworm and it shows no choice among varieties. "Observations made in India, Egypt, and Brazil show that the pink bollworm, under certain conditions, may propagate in plants other than cotton. These include okra, Indian hemp, hollyhock and related plants. In so far as okra and hollyhock are concerned, these observations have been confirmed by investigations made recently in Mexico by Mr. August Busck and his associates. In Texas, in addition to okra, which is very commonly grown, there are four species of hibiscus even more closely related to cotton than okra, which might support the pink bollworm. These wild plants grow in large colonies, and are of very general occurrence. The inspections made during the season in the noncotton zone have included the minute examination of many thousands of these plants. In cases all of the seed pods on large groups of the plants growing in the vicinity of pink bollworm infestations of the year before, were examined with negative results."—From Hunter.

During the summer of 1916, about 400 carloads of Mexican cotton seed were shipped to Texas oil mills. At that time it was not known that the pink bollworm existed in Mexico. However, on November 1, 1916, it was discovered that the cotton of the Laguna District was infested by this insect, and it was first introduced into Texas with the seed imported from that region.

The Mexican seed shipped to Texas was received by eleven oil mills located in various parts of the State. Immediate steps were taken by the Federal Horticultural Board to prevent the insect from becoming established. The cotton-growing vicinity of the mills which received Mexican seed was thoroughly inspected and the first specimen of pink bollworm was found at Hearne, September 10th, 1917, in a small cotton field adjoining a mill which had received Laguna seed. On October 5, 1917,

a single specimen was found at Beaumont, near an oil mill which had also received Mexican seed. The next specimens were found near Anahuac, Chambers County. This infestation cannot be connected with seed shipped from Mexico, and according to the reports of investigations made, the infestation at Anahuac was due to "the washing ashore and breaking of a number of bales of Mexican cotton, which were carried inland by a storm which passed over Galveston in August, 1915".

Additional field examinations, according to the reports, showed the southeast Texas infestation to extend from Beaumont, Jefferson County, to Arcola, about seven miles from the Brazos River. The northernmost point of infestation was in Liberty County, about eighteen miles north of the town of Liberty. This area includes all of Chambers, Galveston, and Jefferson counties and portions of Liberty, Harris, Brazoria, and Hardin counties.

In West Texas three distinct areas of infestation were found to be established, two along the Rio Grande River, one comprising Val Verde, Kinney and Maverick counties—however, no infestations were found in fields in Val Verde, Kinney and Maverick counties, but only in a car at Eagle Pass—the second, Presidio and Brewster counties; the third infestation comprising portions of Reeves and Ward counties. No very definite information relative to the establishment of infestations is available, but it is altogether probable the infestations along the Rio Grande River were made possible by the presence of the insect on the opposite side of the river. The infestation in Reeves and Ward counties has been traced to infested seed received from Presidio County.

In February, 1920, the insect was discovered in Orange County and shortly thereafter in the parishes of Cameron, Jefferson Davis and Calcasieu of Louisiana. The infestation of Cameron parish was very severe and it has been assumed that the insect had been present for a period of at least two years.

The present infestation of the pink bollworm in Texas is localized in four zones.

Upon the discovery of a light infestation of the pink bollworm at

Hearne, a noncotton zone, known as Zone 1, with a radius of three miles, was declared February 25th, 1918, and maintained until October 15th, 1919, when it was reduced to the city limits of Hearne. No additional specimens of pink bollworm have been reported since the initial finding. Zones 2 and 3 comprise all or portions of nine counties in southeast Texas. The infested counties are; Harris, Brazoria, Galveston, Chambers, Liberty, Hardin, Jefferson, Jasper and Orange. The original noncotton proclamation was made on February 25, 1918. On April 18, 1919, the Pink Bollworm Commission at Houston, recommended the changing of noncotton zones 2 and 3 to a regulated zone for the season of 1919. On April 24, 1919, the proclamation of regulated zone for the noncotton zones 2 and 3 was issued. New infestations were found late in 1919 and a continuance of regulated cotton zones was recommended by the Pink Bollworm Commission.

Zone 4 comprises Val Verde, Kinney and Maverick counties. On account of the discovery of the pink bollworm at San Carlos, Mexico, about fourteen miles from the Rio Grande River in the fall of 1917, a proclamation declaring Zone 4 a noncotton zone was declared on February 19, 1918. Later the commission recommended that the noncotton zone be restricted to an area of five miles parallel to the Rio Grande River.

Zone 5 comprises Presidio and Brewster counties. The noncotton proclamation for this zone was is-

sued on April 9, 1919. Out-law cotton was grown during the season of 1919. The Pink Bollworm Commission, in January 1920, recommended the continuance of a noncotton zone.

Zone 6 comprises Reeves and Ward counties. This is a regulated zone. The proclamation establishing a regulated zone was made on April 9, 1919.

The regulated zone has been maintained up to the present time.

Part 2.

Crop Substitutes for Cotton.

If the policy of a noncotton zone in the infested area is adopted it will become necessary to cultivate substitute crops for cotton in the designated area.

It is the opinion of the agronomists of the college that this is an opportune time to inaugurate an active campaign for the development of an agricultural policy in this region based primarily on live stock production. This line of procedure involves nothing more than the best utilization of the natural resources of the area in question. It is believed that the inauguration of such a plan will result in increased prosperity to the farmers of this region. As a basis for the type of agriculture recommended above, four classes of crops are required. They are, pasture, hay, silage and concentrates. Below is given a list of these different classes of crops adapted to southeast Texas, together with information as to planting dates:

Pasture Crops.

Crops.	Varieties	Best Date of Planting.	Latest Date of Planting
Wild pasture.....		Early Spring	Summer.
Bermuda grass....	Common, Giant ..	Feb. 15	March 15
Paspalum		October 15	December 15
Bur Clover		March 1.....	April 15
Lespedeza		February 15	April 1
White Clover.....		February 1.....	April 15
Sweet Clover	White Bloom	February 15	May 1
Rhodes Grass		March 15	July 1
Sudan Grass		February 15	April 15
Para Grass			
Cowpeas	Groff, New Era, Chinese, Red Whippoorwill ..	April 15	July 15
Velvet Beans	Florida	March 20	May 15
Peanuts	Spanish	April 1	June 15
Second Crop Rice..	All Varieties		
Oats	Red Rust Proof ..	September 1	November 15
Barley	Tennessee Winter ..	September 1	November 15
Rye	Abruzzi	September 1	November 15

Hay Crops.

Crops	Varieties	Best Date of Planting	Latest Date of Planting
Prairie Hay			
Rhodes Grass		Feb. 15	May 1
Sudan Grass		March 15	July 1
Sorghum	Red Top, Honey	March 15	July 1
Oats	Red Rust Proof	Sept. 15	Nov. 15
Cowpeas	Groit, New Era, Whippoorwill	April 15	July 15

Silage Crops.

Sorghum	Red Top, Honey	March 15	July 1
Japanese Sugar Cane		Nov. or Feb.	April 1
Corn	Tuxpan, Hastings Prolific, Yellow Creole, June Corn	March 1	June 15

Concentrates.

Corn	Yellow Dent, Prolifics	March 1	May 15
Peanuts	Spanish	April 1	June 15
Rice Bran			
Rice Polish			

Considering the great diversity of pasture, hay, silage, and concentrate crops adapted to this region, the committee recommends that this institution formulate some definite systems of crop planting and crop utilization for men who are engaged in, or may engage in, (1) dairy farming, (2) beef cattle farming, and (3) hog raising, that will enable these farmers to proceed in a systematic

way in getting the maximum return from the enterprise.

Aside from livestock farming, this section has great possibilities in fruit and vegetable farming, being located near good markets in Houston, Galveston, Beaumont, and other cities. The following is a list of the fruit and vegetable crops adapted to this region:

Crops	Varieties	Planting Latest Date of	Best Date of Planting
Beans	Stringless, Greenpod	April 1	June 1
Beans	Tenary	April 15	August 1
Beans	Kentuck Wonder	April 1	August 1
Potatoes	Cobbler or Triumph	February 20	April 1
Spinach	Aragon	October 1	February 15
Spinach	New Zealand	February 1	May 1
Cabbage	Early Jersey, Wakefield	Oct. 1, Jan 15	Oct. 30, March 1
Sweet Potatoes	Porto Rican	April 15	June 1
Cucumbers	White Spine	April 15	May 10
Cantaloupes	Rockyford	April 1	May 10
Peppers	Chinese Giant	February 10	April 1
Egg Plant	Black Beauty	February 10	April 1
Okra	Mammoth	April 1	July 1
Peas	Black Eye	April 1	August 1
Onions	Bermuda, Multiplier	October 1	November 1
Squash	Yellow Summer	April 15	June 1
Watermelons	Tom Watson	April 1	May 15
Dewberries	Haupt	Dec. to Feb.	Nov. to March
Strawberries	Klondike	Nov. to Feb.	Oct to March
Asparagus	Palmeto	Nov. to Feb.	Oct to March
Sweet Corn	Adams Early	March 1	April 1
Orchard Plants		Dec. 1 to March	

Part III.

Administration and Compensation.

It will be seen from Part I that an absolute promise cannot be given that a noncotton zone will eradicate the

pink bollworm. We can only state frankly that its favorite plant is cotton, and that it has been known to infest certain other plants which exist in Texas; but that minute examinations of many thousands of these

plants in the infested zones have failed to reveal the presence of any of the worms. It can be further stated that in the one infested region in Texas where a noncotton zone has been proclaimed and thoroughly enforced throughout a two-year period the insect seems to have been entirely eradicated. It should also be stated that a regulated zone has failed to eradicate the pest and we think we are safe in saying that no entomologist believes that a regulated zone can ever do more than check the rate of increase or spread of the insect if the zone is of any considerable size. As a means of eradication, therefore, a noncotton zone thoroughly enforced is the only kind that would be effective.

However, the matter of a noncotton zone for 1920 in southeast Texas because of the complex situation there resolves itself into one of feasibility. A noncotton zone not thoroughly enforced would be less effective than a regulated zone. An effort has been made by the Pink Bollworm Commission to maintain a regulated zone in the infested region in southeast Texas. But it has been impossible for the commission to completely control the situation because the cotton growers had no assurance that they would be reimbursed for losses sustained.

Under present conditions we face two alternatives which we should trace to their logical conclusions. In the first place, a regulated zone for the present year can be established and a definite policy adopted for putting a non cotton zone into effect next year. This has appealed to many because the cotton that has been planted in the infested region has already reached that stage of advancement that it would make it difficult to destroy it. Both the labor and expense would be a considerable item. There are also practical difficulties of administration connected with the process of destroying the present cotton crop that would arise. On the other hand, if this policy were adopted it would almost certainly bring a federal quarantine at an early date, which, if applied with the same stringency as that adapted to Mexico, would undoubtedly cost the state many millions of dollars, besides the incalculable inconvenience and interruptions and delays to traffic. It would also put off one year and perhaps longer, the final solution of the problem. It would, however, to present the other side of the question, save the loss of the value of this year's cotton crop in that region, which has

been estimated by some as amounting to as much as five million dollars, and might assure better cooperation on the part of the people in this district in the future. It would also give another year for investigation of the subject of other food plants of the insect and help to determine whether or not a noncotton zone would solve the problem of eradication.

The other alternative is to establish a noncotton zone for this year. This, it seems, could not be made effective much, if any, before the present crop is ready to be harvested and it would, therefore, be too late to plant and grow other crops. It would, therefore, involve the payment of the full value of the cotton crop grown in that district this year. It might also result in the refusal of the farmers of the district to cooperate, which in itself would present serious problems. This could be obviated in only one way, viz: by not only a fair but quite liberal reimbursement for all losses sustained, and a prompt settlement with the individual farmers. This plan would certainly prevent a federal quarantine with all of its attendant financial losses and inconveniences.

In arriving at a final decision with reference to which of these alternatives should be finally adopted, we should not forget to compare the cost connected with establishing an effective noncotton zone with chance thereby of eradicating the pest, with the possible financial losses in case the insect spreads over the entire cotton belt of the state. It would seem, judging from authoritative reports, that ten per cent would be a conservative estimate of the possible losses due to the insect should it become established in this state. The average cotton yield for Texas for the ten-year period ending with 1909 was 3,590,300 bales. Estimating the value of each bale at \$100 this would amount to \$538,545,000, and ten per cent of this sum would be \$53,854,000. This would represent an annual loss on cotton lint in Texas alone. This does not include the loss to the cotton seed crop, which would be several million dollars more. In addition to that, until the insect became established in other states, as it surely would, there would also be the burden of a federal quarantine.

A thorough study of the activities of the Pink Bollworm Commission seems to show that the failure of the legislature to provide an appropriation with

which to reimburse farmers for the losses sustained as a result of the destruction of cotton in the infested areas as provided in Section 6 of this act is largely responsible for the dilemma in which we find ourselves at the present time. It is not reasonable to expect the farmers to cheerfully consent to the destruction of their crops for the public welfare without due compensation therefor. It seems, therefore, necessary to take account of this fact in future legislation relating to this subject.

It is heartily recommended that an appropriation to pay for cotton destroyed in 1919, together with interest on the payments allowed, be made available by the legislature at the earliest practicable date. In order that the interest of the general public, as well as the farmers who have sustained losses, may be protected it is recommended that a staff of men trained in farm management methods be appointed to gather and compile data bearing upon all questions of losses sustained by farmers and by gin owners because of restriction on the growing of cotton and the destruction of cotton fields within the infested areas. It is suggested that data bearing on this subject be secured from the following available sources:

- (1) Ginners Report.
- (2) Bureau of Crop Estimates.
- (3) U. S. Census of 1920.
- (4) Office records of the Federal Horticultural Board.
- (5) A personal survey of the farm area.
- (6) Reports and records from each farmer in the restricted areas.

Amendment of the Texas Pink Bollworm Act of 1919.

It is believed that the Pink Bollworm Act can be made the basis for effective legislation dealing with this subject. But the act should be so amended as to include the following additional features:

- (1) A Pink Bollworm Commission. A pink bollworm commission appointed jointly by the governor of Texas and the secretary of agriculture should be provided for in this act, but its composition should be different from that provided for in the present act. This pink bollworm commission should be composed of professional men, scientists and farmers notable either for business and administrative experience, technical knowledge or success-

ful and practical farming. This commission should administer both state and federal funds and have general supervision of the enforcement of the state and federal laws.

- (2) A County Board of Appraisers. The law should provide for a county board of appraisers whose duty it would be to secure reliable data on damages sustained on all cotton destroyed or losses resulting in substitution of other crops for cotton. The county board of appraisers should submit their reports containing all necessary data, with their recommendations and findings to the Pink Bollworm Commission for final approval, modification or reversal.

- (3) A Board of Entomologists. Consisting of three men eminent as scientists, whose duty it should be to work under the general direction of the Pink Bollworm Commission and supply said commission with all necessary information as a basis for the orders and policies adopted by the commission.

- (4) Farm Management Specialists. The law should provide for a staff of farm management specialists and agronomists whose duty it would be to assist all farmers in the infested area in determining desirable substitute crops for cotton and offering expert advice as to the methods of cultivation. This staff of specialists should also assist the county board of appraisers in securing adequate data on which to base estimates for losses sustained by individual farmers.

Appropriation Under This Act.

The legislature should be urged to provide appropriations in adequate sums for carrying out the provisions of this act as follows:

1. An appropriation to cover the cost of the cotton destroyed in the infested area of 1919 including interest on the same.
2. An appropriation to pay losses for 1920 and 1921.
3. An appropriation for administrative costs including salaries, traveling and office expenses of the County Board of Appraisers, the entomologists and specialists in farm management and agronomy.

Part IV.

Investigation in Pink Bollworm Control.

It would be short-sighted policy for the state to stop short of providing

for a thorough investigation of methods of control of pink bollworm depredations in case of failure to eradicate the pest. With the history of the spread of the boll weevil fresh in the minds of most of our people we should profit by the experience connected with the spread of the boll weevil throughout the cotton growing states. If methods of control that are now well known had been adopted in the earliest years of the boll weevil millions would have been saved to the cotton growers of the south. Even should eradication measures prove wholly effective the cotton industry will continue to be menaced as long as infestation exists across the border of Mexico. Protective measures are, therefore, necessary for two reasons: (1) All efforts to eradicate the pest may prove ineffective and the pink bollworm may spread over the entire cotton areas of the state; (2) if this calamity should be prevented at the present time we will still not be free from the danger as long as the pink bollworm exists in Mexico. It seems, therefore, a matter of sound public policy to provide funds for an authoritative study of available methods of control of the pink bollworm should the spread of this worm become inevitable. The fact that the state of Texas has conducted no such investigation up to the present time seems to make it altogether advisable for the legislature to appropriate an adequate sum for this undertaking.

Adequate and effective protective measures are dependent on a thorough and systematic investigation of the entire bollworm problem. This should consist of the following:

(1) A thorough study and review of all existing printed information in all languages relating to the pink bollworm.

(2) A comprehensive study of adequate methods of controlling the insect by both natural and artificial means.

(3) A complete survey of infested regions in Mexico.

It is recommended, therefore, that an appropriation be provided and that the Texas Experiment Station of the Agricultural and Mechanical College be instructed to make this investigation and report its findings to the governor of the state.

Executive Session Set.

Upon the motion of Senator Dean

executive session was set for Thursday, May 27, at 11 o'clock a. m.

Petition Referred.

Senator McNealus sent up an educational petition which was referred to committee of educational affairs.

Bills and Resolutions.

By Senator Westbrook:

S. B. No. 1. A bill to be entitled "An act making appropriation of the sum of Sixteen Thousand dollars, or so much thereof as may be necessary, to pay the contingent expenses of the Third Called Session of the Thirty-sixth Legislature of the State of Texas convened May 20th, etc."

Read first time and referred to Committee on Finance.

By Senator Westbrook:

S. B. No. 2, A bill to be entitled "An Act making an appropriation to pay the per diem and mileage of members and per diem of officers and employees of the Thrid Called Session of the Thirty-sixth Legislature convened on the 20th day of May, 1920, etc., and declaring an emergency."

Read first time and referred to Committee on Finance.

By Senator Westbrook:

S. B. No. 3. A bill to be entitled "An Act making appropriations to cover authorized deficiencies in appropriations heretofore made for the support of the State government, etc., and declaring an emergency.

Read first time and referred to Committee on Finance.

By Senator Westbrook:

S. B. No. 4. A bill to be entitled "An Act to make appropriations for deficiencies in appropriations heretofore made for the support of the State government for the fiscal years ending August 31st, 1918, and August 31st, 1919, to cover duly authorized deficiency claims registered, etc."

Read first time and referred to Committee on Finance.

Adjournment.

At 11:45 o'clock a. m. the Senate, on the motion of Senator Caldwell,

adjourned until 10 o'clock tomorrow morning.

SECOND DAY.

Senate Chamber,
Austin, Texas,
Friday, May 21, 1920.

The Senate met at 10 o'clock a. m., pursuant to adjournment, and was called to order by Lieutenant Governor Johnson.

The roll was called and a quorum was present, the following Senators answering to their names:

Alderdice.	Hall.
Buchanan of Bell.	Hertzberg.
Buchanan of Scurry	Hopkins.
Caldwell.	McNealus.
Clark.	Page.
Cousins.	Rector.
Davidson.	Smith.
Dayton.	Suiter.
Dean.	Westbrook.
Dudley.	Williford.
Faust.	Witt.
Gibson.	

Absent—Excused.

Bailey.	Floyd.
Bledsoe.	Parr.
Carlock.	Strickland.
Dorough.	Woods.

Prayer by Rev. S. H. Morgan, Chaplain.

On the motion of Senator Alderdice, pending the reading of yesterday's Journal, same was dispensed with.

Appointment of Pages.

The Chair announced the appointment of the following pages and porters:

Pages: Newman Marshall, Stanley Hornsby, Wm. Dunn, Lee Williams, C. B. Maynard, Wortham Thompson, Dick Mims, McCall Eilers, Trenton Smith, Tom Weigel, Oliver Hyslop, Joe Erwin.

Porters: Willie Carpenter, Lon Medearis, Jim Holland, Ben Thompson, Sam Grant, Willie Green, Granville Norman; with one additional to be named later.

Petitions and Memorials.

See Appendix.

Message from the Governor.

A messenger from the Governor presented himself at the bar of the Senate Chamber with the following executive messages:

Governor's Office,
Austin, Texas, May 20, 1920.

To the Texas State Senate:

I ask advice, consent and confirmation of the Senate in the appointment of Hon. C. G. Pillot of Houston, Texas, to be Chairman of the San Jacinto Battlefield Commission.

Respectfully submitted,
W. P. HOBBY,
Governor.

Governor's Office,
Austin, Texas, May 20, 1920.

To the Texas State Senate:

Gentlemen: I ask the advice, consent and confirmation of the Senate to the following recess appointments:

A member of the Board of Directors of the Agricultural and Mechanical College, T. N. Jones of Tyler, appointed May 18th, 1920, vice A. B. Davidson of Cuero, deceased.

District Attorney for the 4th Judicial District, J. H. McHaney of Longview, appointed January 12th, 1920, vice Clifford Stone of Henderson, resigned.

Respectfully submitted,
W. P. HOBBY,
Governor.

Message from the House.

Hall of the House of Representatives,
Austin, Texas, May 20, 1920.,
Hon. W. A. Johnson, President of the Senate.

Sir: I am directed by the House to inform the Senate that the House has passed the following bills:

H. B. No. 1, A bill to be entitled "An Act making an appropriation to pay the per diem and mileage of members and per diem of officers and employes of the Third Called Session of the Thirty-sixth Legislature of the State of Texas, convened on the 20th of May, 1920, by proclamation of the Governor, providing how accounts may be approved, and declaring an emergency."

H. B. No. 2, A bill to be entitled "An Act making appropriation of the sum of sixteen thousand dollars, or so much thereof as may be necessary,